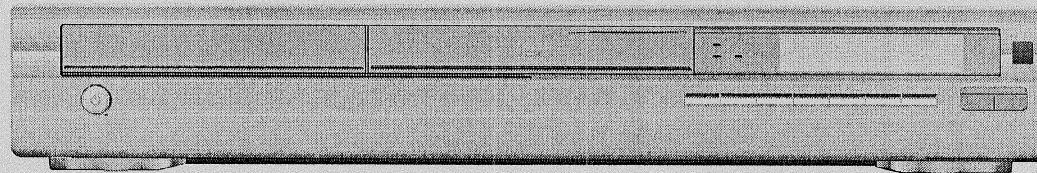


Service Manual

DVD HOME THEATRE SYSTEM



DV-R3300SS

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PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety characteristics. These safety characteristics often pass unnoticed and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts that have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by \triangle in the schematic diagram and the parts list. Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts that do not have the same safety characteristics as specified in the parts list may create shock, fire or other hazards.

SPECIFICATIONS

| | |
|------------------------------|-------------------------------------------|
| Unit | |
| Power supply | AC 230V ~ 50Hz |
| Power consumption | 25W |
| Signal system | Standard PAL |
| Laser | Semiconductor laser, wavelength 650/780nm |
| Signal-to-noise | More than 95dB |
| Audio dynamic range | More than 93dB |
| Harmonic distortion | Less than 1% |
| Operating temperature | 41°F to 95°F (+5°C to 35°C) |
| Operating humidity | 5% to 85% (no condensation) |
| Video Output / Input | |
| Output level | 1 Vp-p (75Ω) |
| Input level | 750mV input (5Ω 10% THD output) |
| Jack | RCA/Pin jack |
| Audio Output / Input | |
| Output level | 1.80 ± 0.2 Vrms (1 kHz, 0dB) |
| Input level | 750mV input (5Ω 10% THD output) |
| Jack | RCA/Pin jack |
| Speakers Section | |
| Speakers (Front/Center/Rear) | Bass reflex |
| Speaker system | 70 mm dia. cone type |
| Speaker unit | 8 ohms |
| Subwoofer Section | |
| Power consumption | 230W |
| Speaker system | Bass reflex |
| Speaker unit | 165 mm dia. cone type |
| Rated impedance | 4 ohms |

Specifications and external appearance are subject to change without notice.

PERFORMANCE SPECIFICATIONS

| GENERAL TEST CONDITION | |
|------------------------|-------------------------------------------|
| Power Supply | : AC 230V 50Hz |
| Output Load | : 8 ohm non-reactive x5 Subwoofer 4ohm x1 |
| Reference Output | : 500 mW |
| Input Signal Source | : External AM Loop Antenna |
| Modulation | : 75 ohm Dummy Antenna for FM |
| | : 30% 400Hz for AM 80% for Power |
| | : 75kHz Deviation 1000Hz for FM |
| | : 7.5kHz Pilot Tone |
| | : 67.5kHz L+R 1000Hz |

AUX IN DOLBY PRO LOGIC SECTION

| | TEST ITEMS | UNIT | NOMINAL | LIMIT |
|----|------------------------------------------|---------------------------------------------|--------------------|----------------------|
| 1 | 10% THD Power AC (FL, FR) | W | 30 | 26 |
| 2 | Frequency Response (CT) 1K=0dB | 20Hz dB 100Hz dB 10kHz dB 20kHz dB | -10 0 0 0 | ±5 ±3 ±3 ±6 |
| 3 | Frequency Response (RR, RL) 1K=0dB | 20Hz dB 100Hz dB 10kHz dB 20kHz dB | -10 0 0 0 | ±5 ±3 ±3 ±5 |
| 4 | Frequency Response (FL, FR) 1K=0dB | 20Hz dB 100Hz dB 10kHz dB 20kHz dB | -10 0 0 0 | ±5 ±3 ±3 ±3 |
| 5 | Frequency Response (Subwoofer) 1K=0dB | 20Hz dB 100Hz dB | 43 43 | 35 35 |
| 6 | 10% THD Power AC (Subwoofer) | W | 50 | 45 |
| 7 | Subwoofer THD (100Hz Ref O/P) | % | 0.5 | 1.0 |
| 8 | THD (1kHz, Ref O/P) FR, FL | % | 0.5 | 0.8 |
| 9 | Channel Unbalance (L&R) | 1kHz dB | ±1 | ±3 |
| 10 | Minimum Vol Hum (UNWGTD/WGTD) | mV | 3 | 8 |
| 11 | Maximum Vol Hum (UNWGTD/WGTD) | mV | 8 | 15 |
| 12 | S/N (UNWGTD/CCIR-ARM2K) (L&R) | 1kHz dB | 60 | 55 |
| 13 | Separation (FL & FR) | dB | 48 | ±5 |

REMARKS:

NOTE: All measurement should be done at bypass mode without EQ effects.

More audio pro logic : on

ITEM 1,2,3,4 Should be set up at DVD mode, and set subwoofer as off, speaker as large.

PERFORMANCE SPECIFICATIONS - CONTINUED

(FM) SECTION, FREQUENCY, MODULATION

| | TEST ITEMS | UNIT | NOMINAL | LIMIT |
|----|-----------------------------------------------------------------------------------------|--------------------------|----------------------|----------------|
| 1 | Tuning Range | MHz | 87.5 - 108 | - |
| 2 | I. F. | MHz | 10.7 | ±0.3 |
| 3 | 30dB S/N | 90MHz 98MHz 106MHz | μV 20 20 20 | 25 25 25 |
| 4 | -3dB Limit Sens. | dB | 16 | 30 |
| 5 | I. F. Rej. | 98MHz | dB | 60 50 |
| 6 | Image Rej. | 106MHz | dB | 30 26 |
| 7 | Spurious Rejection (F+0.535 MHz) (Max. Sens. + 6dB) | dB | 40 | 35 |
| 8 | AM Suppression (60dB I/P) | dB | 45 | 30 |
| 9 | Mod. Hum (60dB I/P) | dB | 48 | 42 |
| 10 | Distortion at 1mV/m (Mono) 100 mV/m | 22.5kHz 75kHz | % % 3 | 1 2 5 |
| 11 | Audio Fidelity, (-3dB) (Pre-emphass) (75μS) (FR.FL) Subwoofer 1kHz=0dB | Hz 100Hz | 60/9000 36 | 120/6000 30 |
| 12 | Power Out, 10% THD (75K DEV) 1K=1mV Subwoofer Power Out, 10% THD (75K DEV) 100Hz=1mV | W W | 30 50 | 26 45 |
| 13 | Low Voltage AC | % | 80 | 85 |
| 14 | S/N Ratio at 1mV (Stereo) Dev. 10% Pilot with "19" Filter | 98MHz | dB - | 50 42 - - |
| 15 | Alternate Channel Selective ±400 kHz | dB | 25 | 18 |
| 16 | Stereo Separation | dB | 26 | 22 |
| 17 | 19 kHz Leak Carrier | dB | 32 | 27 |
| 18 | Stereo LED Indication | dB | 26 | 30 |
| 19 | Step Frequency | kHz | - | 100 |
| 20 | Auto Stop Sens. | dB | 26 | 32 |
| 21 | Minimum Vol Hum | mV | 1.0 | 3.0 |

REMARKS:

NOTE: All measurement should be done at bypass mode without EQ effects.

PERFORMANCE SPECIFICATIONS - CONTINUED

(AM) SECTION, AMPLITUDE, MODULATION

| | TEST ITEMS | UNIT | NOMINAL | LIMIT |
|----|-----------------------------------------------------|--------------------------|----------------|-------------------------|
| 1 | Tuning Range | kHz | 531 - 1602 | - |
| 2 | I. F. | kHz | 450 | ±3 |
| 3 | S/N 10mV/m | 1MHz | dB | 36 30 |
| 4 | Sens. (at S/N 20dB) | 0.6MHz 1MHz 1.4MHz | dB dB dB | 60 64 60 64 60 64 |
| 5 | I. F. Rej. | 0.6MHz | dB | 50 46 |
| 6 | Image Rej. | 1.4MHz | dB | 30 24 |
| 7 | Spurious Rejection | dB | 35 | 25 |
| 8 | Bandwidth, (Max. Sens. + 6 dB) | 1MHz | kHz | 6 4 - 9 |
| 9 | ACA (±9 kHz) Input | 1MHz | dB | 20 15 |
| 10 | AGC Figure Merit | 100mV/m | dB | 45 40 |
| 11 | Distortion, 5mV/m, 30% 80% | % % | 1 3 3 6 | |
| 12 | a. 10% THD Power AC b. Woofer 10% | DEV 80% DEV 80% | W W | 30 26 50 45 |
| 13 | a. Tweet (2nd 910kHz & 3rd 1350kHz) at 75 dB I/P | dB | 15 | 10 |
| 14 | Audio Fidelity, Centre ±(6 dB) | Hz | 60/2200 | 120/2000 |
| 15 | Low Voltage AC | % | 80 | 85 |
| 16 | a. Mod. Hum 10mV/M b. Hum at Min. Vol. | dB mV | 36 1 | 30 3 |
| 17 | Auto Stop Sens. | dB | 64 | 70 |
| 18 | Step Frequency | kHz | - | 10 |

REMARKS:

NOTE: All measurement should be done at bypass mode without EQ effects.

VIDEO SECTION

| | TEST ITEMS | UNIT | NOMINAL | LIMIT |
|---|--------------------------------------------------------------------------------|---------------------------------------------------------------------------|----------------------------------|---------------------------------------------------|
| 1 | Signal Level (LT2-1) 75Ω Terminate Oscilloscope 75% Color Bar | Composite S-Y V(pp) S-C (BURST) V(pp) Component-Y V(pp) | V(pp) 0.714 0.286 0.714 | 1.0 ±0.2 ±0.2 ±0.05 ±0.2 |
| 2 | Frequency Char. Composite (LT2-1, REF=0dB 0.5MHz, L156 VM700A Composite) | 1.0/0.5MHz 2.0/0.5MHz 4.0/0.5MHz 4.75/0.5MHz 5.75/0.5MHz | dB dB dB dB dB | 0 ±2.0 0 ±2.0 0 ±2.5 0 ±3.5 -2.0 ±3-4 |
| 3 | Frequency Chap. S-Y (LT2-1, REF=0dB 0.5MHz, L156 VM700A) S-Y | 1.0/0.5MHz 2.0/0.5MHz 4.0/0.5MHz 4.75/0.5MHz 5.75/0.5MHz | dB dB dB dB dB | 0 ±2.0 0 ±2.0 0 ±2.5 0 ±2.5 -2.0 ±3-4 |
| 4 | Composite Video-S/N (LT2-1) One Line Only L131 VM700A | 100K-4.2MHz (SC TR ON) | dB | 60 50 |
| 5 | S-Y S/N (LT2-1 One Line Only) | 100K-4.2MHz (SC TR ON) | dB | 60 50 |
| 6 | Color-AM Color-PM (One Line Only) (LT2-1, L131 VM700A) | 100Hz-500kHz | dB dB | >40 >40 |

MW/FM STEREO & RDS TUNING WITH DVD PLAYER

| | FM STEREO & RDS SECTION 37.5kHz (MAIN+SUB 75 kHz (PILOT) 1.2K (RDS) DEV & 1kHz INPUT) | UNIT | NOR | LIMIT |
|---|------------------------------------------------------------------------------------------|------------------------------|----------------|----------|
| 1 | Stereo Separation 1mV Input | MOD FREQ 100Hz L/R R/L | dB 30 30 | 25 25 |
| | | MOD FREQ 1kHz L/R R/L | dB 30 30 | 25 25 |
| | | MOD FREQ 10kHz L/R R/L | dB 25 25 | 18 18 |
| 2 | Stereo On Sensitivity | 98MHz | dB | 5 <18 |
| 3 | S.N.C (SEP=10dB) | 98MHz | dB | 34 34±8 |
| 4 | RDS Indicator Sensitivity | 98MHz | dB | 28 <36 |
| 5 | RDS Seek Sensitivity | 98MHz | dB | 28 <36 |
| 6 | TA Indicator Sensitivity | 98MHz | dB | 28 <36 |
| 7 | TA Seek Sensitivity | 98MHz | dB | 28 <36 |

PERFORMANCE SPECIFICATIONS - CONTINUED

DVD AUDIO SECTION (LINE OUTPUT)

| | TEST ITEMS | UNIT | NOMINAL | LIMIT |
|----------------------|-----------------------------------------------------------------|-------------------------------------------|-----------------------|--------------------------------------|
| 1 | THD+N (LT2-1, 3-1 20kHz LPF On) | % | | 0.05 |
| 2 | Output Level (LT2-1, 3-1) | V | 2 | ±0.3 |
| 3 | S/N (LT2-1, 3-20 JIS-A Filter On) | dB | 80 | 70 |
| 4 | Crosstalk (LT2-1, 3-21.22 1kHz, BPF On) | dB | | 70 |
| 5 | Frequency Range (48kHz / 24BIT) (LT2-1. 3-1~19) (FL, FR) | 31Hz 499Hz 1kHz 10kHz 22kHz | 0 0 0 0 0 | ±1.0 ±1.0 ±1.0 ±1.0 ±1.0 |
| 6 | Frequency Range (96kHz / 24BIT LT2-1, 6-1~12) (FL, FR) | 20Hz 400Hz 1kHz 12.8kHz 20kHz | 0 0 0 0 0 | ±3.0 ±3.0 ±3.0 ±3.0 ±3.0 |
| 7 | Digital Output Level (LT2-1, 1-1 75Ω Loading On) | mV | 500 | ±100 |
| 8 | Dynamic Range | dB | - | 80 |
| 9 | Black Band (TDV 545) | μM | - | 600 |
| 10 | Finger Print (TDV 545) | μM | - | No.13 |
| 11 | Eccentric (MDVD142 TEAC) | μM | - | 200 |
| 12 | Vertical (MDVD151 TEAC) | mm | - | 0.6 |
| CD SECTION | | | | |
| 1 | Interruption (Philips SBC444A) | μM | - | 600 |
| 2 | Black Dot | μM | - | 600 |
| 3 | Fingerprint | μM | - | No.18 |
| 4 | Eccentric (TCO-712 ABEX) | μM | - | 140 |
| 5 | Vertical (TCO-713R ABEX)) | mm | - | 0.8 |
| CD-R SECTION | | | | |
| 1 | Black Band (TCD-R025W) | μM | 800 | 600 |
| 2 | Finger Printers (TCD-R025W) | μM | - | 65 |
| 3 | Scratch (TCD-R021W) | mm | 1.8 | 1.6 |
| 4 | Eccentric (TCD-R012W) | μM | - | 140 |
| 5 | Deviation (TCD-R032W) | μM | - | 810 |
| CD-RW SECTION | | | | |
| 1 | Black Band (TCD-W025W) | μM | 600 | 500 |
| 2 | Finger Printers (TCD-W025W) | μM | - | 65 |
| 3 | Scratch (TCD-W021W) | mm | - | 1.0 |
| 4 | Eccentric (TCD-W012W) | μM | - | 140 |
| 5 | Deviation (TCD-W032W) | μM | - | 810 |

PERFORMANCE SPECIFICATIONS - CONTINUED

AMPLIFIER SECTION

| | TEST ITEMS | UNIT | NOMINAL | LIMIT | |
|----|------------------------------------------|---------------------------------|----------------------|--------------------|----------------------|
| 1 | 10% THD Power AC (FL, FR) | W | 30 | 26 | |
| 2 | Frequency Response (CT) 1K=0dB | 20Hz 100Hz 10kHz 20kHz | dB dB dB dB | -10 0 0 0 | ±5 ±3 ±3 ±6 |
| 3 | Frequency Response (RR, RL) 1K=0dB | 20Hz 100Hz 10kHz 20kHz | dB dB dB dB | -10 0 0 0 | ±5 ±3 ±3 ±5 |
| 4 | Frequency Response (FL, FR) 1K=0dB | 20Hz 100Hz 10kHz 20kHz | dB dB dB dB | -10 0 0 0 | ±3 ±3 ±3 ±3 |
| 5 | Frequency Response (Subwoofer) 1K=0dB | 20Hz 100Hz | dB dB | 36 36 | 30 30 |
| 6 | 10% THD Power AC (Subwoofer) | W | 50 | 45 | |
| 7 | Subwoofer THD (100Hz Ref O/P) | % | 0.5 | 1.0 | |
| 8 | THD (1kHz, Ref O/P) FR, FL | % | 0.5 | 0.8 | |
| 9 | Channel Unbalance (L&R) | 1kHz | dB | ±1 | ±3 |
| 10 | Minimum Vol Hum (UNWGTD/WGTD) | mV | 5 | 8 | |
| 11 | Maximum Vol Hum (UNWGTD/WGTD) | mV | 8 | 15 | |
| 12 | S/N (UNWGTD/CCIR-ARM2K) (L&R) | 1kHz | dB | 60 | 55 |
| 13 | Bass Effect FL, FR | dB | ±10 | ±4 | |
| 14 | Ttreble Effect FL, FR | dB | ±10 | ±4 | |
| 15 | Middle Effect FL, FR | dB | ±10 | ±4 | |
| 16 | Separation (FL & FR) | dB | - | 45 | |
| 17 | Crosstalk For Input (AUX/CD-REF) W/BPF | dB | - | 45 | |

REMARKS:

Level Matching

CD -10dB REF

AM 55% 5mV

FM 40kHz 1mV

AUX IN 750mV

±3

±3

±3

NOTE: All measurement should be done at bypass mode without EQ effects.

Audio others: 6ch

More audio prologic: on

ITEM 1,2,3,4 Set up Subwoofer as off Speaker as large.

ELECTRICAL PARTS LIST

| Ref. No. | Description | Mfr's Part No. | Qty. |
|----------------------------------------------|-----------------------------------------------------------------------------------|----------------|------|
| PCB | | | |
| OUTPUT PCB | PCB STS61AAST-01-03 282x94x1.6mm (94HB) | 033-STS61A-102 | 1 |
| DISPLAY & KEY PCB | PCB STS61AAST-01-02 179x169x1.6mm/3 (94HB) | 033-STS61A-101 | 1 |
| RECTIFIER PCB | PCB STS61AAST-01-04 150x140x1.6mm (94V0) | 033-STS61A-103 | 1 |
| MPEG+SERVO PCB | PCB STS21AAST-01-02 150x120x1.6mm (F44) | 033-STS21A-101 | 1 |
| LOAD MOTOR PCB | PCB STS21AAST-01-09 171x88.5x1.6mm/12 (94V0) | 033-STS21A-108 | 1 |
| SCART PCB | PCB STS21AAST-01-05 140x95x1.6mm/4 (94V0) | 033-STS21A-104 | 1 |
| TUNER PCB | PCB STS21AAST-01-04 141x130x1.6mm/3 (94V0) | 033-STS21A-103 | 1 |
| SUB-WOOFER AMPLIFIER PCB | PCB SWT1-01-01,02,03 (94V0) | 033-00SWT1-600 | 1 |
| CONNECTION PCB | PCB SWT1-01-04 (94V0) | 033-00SWT1-600 | 1 |
| SUB-WOOFER RECTIFIER PCB | PCB SWT1-01-05 (94V0) | 033-00SWT1-600 | 1 |
| LED PCB | PCB SWT1-01-06 (94V0) | 033-00SWT1-600 | 1 |
| SHIELDING PCB | PCB SWT1-01-07 200x86x0.8mm (94HB) | 033-00SWT1-100 | 1 |
| ACCESSORY PORTION | | | |
| | RM CONTROL HANDSET (AKAI/DV-R3100/3110/3300SS) w/CAM0122 SPY FOR STS25/61) | 043-R15448-051 | 1 |
| | FFC CABLE 22 PINS L=158mm 4+150+4 P:1mm | 040-220158-100 | 1 |
| | UL2896 0.035x0.7 | | |
| | JP WIRE AWG26#UL1007 1500mm BLK CRIMPED w/TERMINAL SHS #STV8-TIE AND TUBE (75ohm) | 054-010A50-090 | 1 |
| | AV CABLE 1.5M COAXIAL BK CABLE w/3 RCA PLUG RED,WHT,YEL #3C RCA&RCA-1500BK | 122-004220-151 | 1 |
| | SCART CABLE 2000mm w/3 PIN RCA HS02038-20-20 | 122-00A020-200 | 1 |
| | BATTERY #GP15G 1.5V AA' SIZE (GP) | 130-615004-001 | 2 |
| | MERCURY & CADMIUM FREE (2PCS/PACKAGE) | | |
| | AM LOOP ANT.388-88 & 388-89 MOLD BK (ABS) | 132-020388-882 | 1 |
| | 5264-2 2.54mm w/5750mm BK AWG26#UL1007 | | |
| AUX-IN (2.1CH) PORTION | | | |
| RESISTORS | | | |
| R517,518,523,524,609 | *CdF RESISTOR 10 Kohm +-5% 1/16W (1/W) | 001-010351-016 | 5 |
| R561,563 | *CdF RESISTOR 100 Kohm +-5% 1/16W (1/W) | 001-010451-016 | 2 |
| R513,514 | RESISTOR 18 Kohm +-5% 1/16W (1/W) | 001-018351-016 | 2 |
| R515,516,521,527,528,562 | *CdF RESISTOR 22 Kohm +-5% 1/16W (1/W) | 001-022351-016 | 6 |
| R525,526 | RESISTOR 220 Kohm +-5% 1/16W (1/W) | 001-022451-016 | 2 |
| R519,520 | RESISTOR 27 Kohm +-5% 1/16W (1/W) | 001-027351-016 | 2 |
| R541 | *CdF RESISTOR 33 Kohm +-5% 1/16W (1/W) | 001-033351-016 | 1 |
| R529,530,558,559 | *CdF RESISTOR 4.7 Kohm +-5% 1/16W (1/W) | 001-047251-016 | 4 |
| R501,502,503,504,505,506 | *CdF RESISTOR 47 Kohm +-5% 1/16W (1/W) | 001-047351-016 | 6 |
| R507,508,509,510,511,512 | RESISTOR 8.2 Kohm +-5% 1/16W (1/W) | 001-082251-016 | 6 |
| CAPACITORS | | | |
| C501,502 | CERAMIC CAP 100 pF/50V +-10% | 003-010110-050 | 2 |
| C584 | CERAMIC CAP 0.002 uF/50V +80%-20% | 003-020280-050 | 1 |
| C511,512 | CERAMIC CAP 220 pF/50V +-10% | 003-022110-050 | 2 |
| C503,504,505,506,507,508,513,514,515,517,518 | ELECT CAP 4.7 MFD/50V +-20% (5x11) | 006-004000-50D | 11 |
| C516,525 | ELECT CAP 10 MFD/50V +-20% (5x11) | 006-010000-50D | 2 |
| C509 | *CdF ELECT CAP 47 MFD/16V +-20% (5x11) | 006-047000-16D | 1 |
| C570 | ELECT CAP 470 MFD/16V +-20% (10x12.5) | 006-047100-16D | 1 |
| TRANSISTORS | | | |
| Q501,502 | TRLNPNSST-TAP&TO-092 3DG1815 | 008-618150-000 | 2 |
| INTEGRATED CIRCUIT | | | |
| IC502 | IC BA4558N O.AMP | 010-404558-000 | 1 |
| DIODE | | | |
| ZD601 | ZENER BZX55C6V8CECCL, 6.8V, 1/2W (ROHM) SGS-THOMSON | 011-010068-120 | 1 |

ELECTRICAL PARTS LIST - CONTINUED

| Ref. No. | Description | Mfr's Part No. | Qty. |
|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|----------------|------|
| SWITCH | | | |
| SW501 | SLIDE SW 1P2T SS12F47G9 | 025-120091-003 | 1 |
| INDUCTORS | | | |
| FB501,502,503 | *CdF FERRITE BEAD INDUCTOR #BL01RN1-A62 0.45 uH/7A (5x3.6mm) (87-008-372-01) | 032-101162-000 | 3 |
| MISCELLANEOUS | | | |
| JK501 | PIN JACK HSP-253V-14 (KUNMING) YELLOW,RED,WHITE/BODY WHITE | 118-020253-000 | 1 |
| WH501 | FFC CONN 6232 22 PINS w/o LOCK PITCH:1mm 00 6232 022 006 800 VERTICAL TYPE | 135-006232-220 | 1 |
| VOLUME PORTION | | | |
| RESISTORS | | | |
| R1604 | *CdF RESISTOR 10 ohm +-5% 1/16W (1/W) | 001-010051-016 | 1 |
| R610,1693,1694, J290 | *CdF RESISTOR 1 Kohm +-5% 1/16W (1/W) | 001-010251-016 | 4 |
| R570,571,1691,1692 | *CdF RESISTOR 10 Kohm +-5% 1/16W (1/W) | 001-010351-016 | 4 |
| R645,646,647 | *CdF RESISTOR 150 ohm +-5% 1/16W (1/W) | 001-015151-016 | 3 |
| R1702,1703 | *CdF RESISTOR 22 ohm +-5% 1/16W (1/W) | 001-022051-016 | 2 |
| R1650,1651,1663,1665,1671,1673 | *CdF RESISTOR 2.2 Kohm +-5% 1/16W (1/W) | 001-022251-016 | 6 |
| R1618,1619,1624,1625,1626, 1627,1634,1635,1664,1666,1672, 1674 | *CdF RESISTOR 22 Kohm +-5% 1/16W (1/W) | 001-022351-016 | 12 |
| R1661,1675 | *CdF RESISTOR 3.3 Kohm +-5% 1/16W (1/W) | 001-032251-016 | 2 |
| R1701 | *CdF RESISTOR 4.7 Kohm +-5% 1/16W (1/W) | 001-047251-016 | 1 |
| R1649 | RESISTOR 56 ohm +-5% 1/16W (1/W) | 001-056051-016 | 1 |
| R1662,1676 | RESISTOR 6.2 Kohm +-5% 1/16W (1/W) | 001-062251-016 | 2 |
| R1695,1696,1698,1699 | RESISTOR 68K +-5% 1/16W (1/W) | 001-068351-016 | 4 |
| CAPACITORS | | | |
| C1660,1680 | CERAMIC CAP 0.002 uF/50V +80%-20% | 003-020280-050 | 5 |
| C1661,1663,1681,1682 | #MYLAR CAP 0.01 uF/100V +-10% | 004-010310-100 | 2 |
| C1662,1679 | #MYLAR CAP 0.1 uF/50V +-10% | 004-010410-050 | 4 |
| C1664,1678 | #MYLAR CAP 0.015 uF/100V +-5% | 004-015350-100 | 2 |
| C1614,1615,1626,1627,1638, 1639,1665,1666,1667,1668,1669, 1670,1671,1672,1674,1675,1676 | ELECT CAP 1 MFD/50V +-20% (5x11) | 006-001000-50D | 17 |
| C1673,1677 | ELECT CAP 10 MFD/50V +-20% (5x11) | 006-010000-50D | 2 |
| C315,653,655 | ELECT CAP 100 MFD/16V +-20% (5x11) | 006-010100-16D | 3 |
| C1658 | ELECT CAP 470 MFD/16V +-20% (10x12.5) | 006-047100-16D | 1 |
| TRANSISTORS | | | |
| Q522,523,1606,1607,1608,1609, 1610,1611,1612,1617 | TRLNPNSST-TAP&TO-092 3DG1815 | 008-618150-000 | 10 |
| Q1616 | TRLPNPPWR-TAP&TO-092 3CA8550 | 008-685500-000 | 1 |
| Q605 | TR NPNSST-RAD&SC-072 DTC114ES (ROHM) | 008-801141-000 | 1 |
| Q521 | TR NPNSST-RAD&SC-072 DTA114TS/A (ROHM) KRA-111M (KEC) | 008-801142-000 | 1 |
| Q1603 | TR PNPSST-BUK&SC-072 DTA114YSTP/DTA114YS | 008-801144-000 | 1 |
| INTEGRATED CIRCUIT | | | |
| IC504 | IC AUDIOLEVELSENSOR PT2322-S (SOP) 6-CHANNEL AUDIO PROCESSOR (ANGUS) | 010-142322-000 | 1 |
| DIODES | | | |
| D501,1619,1620,1621,1622,1623, 1624,1625,1626,1627,1628,1629 | DIODE IN-4148 ROHM/TELEFUNKEN TAP**50 KEL(NS)(TAP:52mm)NS(FAIRCHILD)/SEMTECH | 011-004148-000 | 12 |
| WIRES | | | |
| | JP WIRE AWG26#1007 3x3mm 100mm BLACK | 051-673100-009 | 1 |
| | JP WIRE AWG26#1007 3x3mm 150mm BLACK | 051-673150-009 | 1 |

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| Ref. No. | Description | Mfr's Part No. | Qty. |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|----------------------------------|--------|
| A' B' | JP WIRE AWG26#1007 5x5mm 220mm BLACK | 051-675220-009 | 2 |
| | JP WIRE AWG26#1007 5x5mm 280mm BLACK | 051-675280-009 | 1 |
| MISCELLANEOUS | | | |
| JK505 | MINI DIN SOCKET MDSL-09SC0A (LEOCO) | 119-000090-000 | 1 |
| RL502 | RELAY 12V 200mW ME-1-12BS 1P2T | 128-120112-001 | 1 |
| RL501 | RELAY 12V 200mW ME-2-12 2P2T | 128-120212-001 | 1 |
| WH502 | *CdF HEADER CTL 8 PINS PHS-08 PITCH 2mm STRAIGHT TYPE WHT COLOR (MARKING:HR) | 135-PHS080-080 | 1 |
| | *CdF SOLDERING LUG | 137-300000-000 | 2 |
| CPU PORTION | | | |
| RESISTORS | | | |
| R301,302,303,304,305,306,307, 308,309,316,318,319,321,322, 330,331,333,334,337,338,339, 342,343,344,345,346,347,350, 361,364,384,398,399,400,401 | *CdF RESISTOR 10 Kohm +-5% 1/16W (1/BW) | 001-010351-016 | 35 |
| R348 | *CdF RESISTOR 15 Kohm +-5% 1/16W (1/BW) | 001-015351-016 | 1 |
| R313,314,315 | *CdF RESISTOR 220 ohm +-5% 1/16W (1/BW) | 001-022151-016 | 3 |
| R325 | *CdF RESISTOR 2.2 Kohm +-5% 1/16W (1/BW) | 001-022251-016 | 1 |
| R340,341 | *CdF RESISTOR 22 Kohm +-5% 1/16W (1/BW) | 001-022351-016 | 2 |
| R402,403 | RESISTOR 27 Kohm +-5% 1/16W (1/BW) | 001-027351-016 | 2 |
| R322,335,336 | *CdF RESISTOR 33 ohm +-5% 1/16W (1/BW) | 001-033051-016 | 3 |
| R326,385,391 | *CdF RESISTOR 4.7 Kohm +-5% 1/16W (1/BW) | 001-047251-016 | 3 |
| R560,564 | RESISTOR 5.6 Kohm +-5% 1/16W (1/BW) | 001-056251-016 | 2 |
| R324 | RESISTOR 8.2 Kohm +-5% 1/16W (1/BW) | 001-082251-016 | 1 |
| CAPACITORS | | | |
| C302 | CERAMIC CAP 0.02 uF/50V +80%-20% | 003-020380-050 | 1 |
| C307,308 | CERAMIC CAP 68 pF/50V +-10% | 003-068010-050 | 2 |
| C305,306 | CERAMIC CAP 30 pF/50V +-5% (NPO) (CC45-CH1H300J/RBU04CH300J-L) | 003-430050-050 | 2 |
| C309 | ELECT CAP 4.7 MFD/50V +-20% (5x11) | 006-004000-50D | 1 |
| C301 | ELECT CAP 47000 MFD/5.5V DC +80-20% (STAR CAP) (SC-DA5R5 473 H) | 006-747300-05C | 1 |
| TRANSISTORS | | | |
| Q301 | TR NPN SST-&&&&& 3DG1417 | 008-601417-000 | 1 |
| Q302 | TR NPN SST-RAD&SC-072 DTC114ES (ROHM) | 008-801141-000 | 1 |
| INTEGRATED CIRCUITS | | | |
| IC302 | IC 74HC373(SOL)/SN74HC373D/DW TC74HC373AF | 010-070373-000 | 1 |
| IC301 | ICMCU-4BK-LCD TMP87EP26F-3D72 (ALDIAS-DVD32) FLASH MCU | 010-918726-000 | 1 |
| DIODES | | | |
| D301,302,303,304 | DIODE IN-4148 ROHM/TELEFUNKEN TAP**50 KEL(NS)(TAP:52mm)(NS)(FAIRCHILD)SEMTECH | 011-004148-000 | 4 |
| RESONATOR | | | |
| CX301 | CERAMIC RESONATOR 8 MHz CSA 8.00 MTZ (MURATA) (87-A70-120-08C) | 020-000800-000 | 1 |
| MISCELLANEOUS | | | |
| R385 TO R390 | FERRITE CORE B15 UH 26x30x13 (LF-130) OD:26mm ID:13mm T=30mm JP WIRE AWG28#1007 4x4mm 40mm BLACK | 032-226030-013 | 1 |
| JK502 | PIN JACK BOARD MSP-244V1-34 NI YEL,ORN, WHT,RED | 051-874040-009 118-020244-000 | 1 1 |
| JK503 | DIN JACK HDC-056 (KUNMING) | 119-000056-000 | 1 |
| WH305 | *CdF HEADER CTL 3 PINS PHS-03 PITCH 2mm STRAIGHT TYPE WHT COLOR (MARKING:HR) | 135-PHS030-030 | 1 |

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| Ref. No. | Description | Mfr's Part No. | Qty. |
|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------|
| WH301,302,304 | HEADER CTL 10 PINS PHS-10 PITCH 2mm STRAIGHT TYPE WHT COLOR (MARKING:HR) | 135-PHS100-100 136-KZ0626-000 | 3 1 |
| WH303 | HSG (2.54mm) MOLEX 5264-06 TO JST 6P-SAN w/260mm R,BK,Y,OR,GR,BL AWG28#UL1007 | | |
| FRONT PANEL PORTION | | | |
| RESISTORS | | | |
| R367,368,369,375,376,377,378 | *CdF RESISTOR 100 ohm +-5% 1/16W (1/BW) | 001-010151-016 | 7 |
| R358 | *CdF RESISTOR 10 Kohm +-5% 1/16W (1/BW) | 001-010351-016 | 1 |
| R354 | *CdF RESISTOR 1.5K +-5% 1/16W (1/BW) | 001-015251-016 | 1 |
| R373 | *CdF RESISTOR 220 ohm +-5% 1/16W (1/BW) | 001-022151-016 | 1 |
| R355 | *CdF RESISTOR 2.2 Kohm +-5% 1/16W (1/BW) | 001-022251-016 | 1 |
| R353 | *CdF RESISTOR 22 Kohm +-5% 1/16W (1/BW) | 001-022351-016 | 1 |
| R356 | *CdF RESISTOR 3.3 Kohm +-5% 1/16W (1/BW) | 001-033251-016 | 1 |
| R359 | *CdF RESISTOR 33 Kohm +-5% 1/16W (1/BW) | 001-033351-016 | 1 |
| R370 | RESISTOR 390 ohm +-5% 1/16W (1/BW) | 001-039151-016 | 1 |
| R352,372 | *CdF RESISTOR 4.7 Kohm +-5% 1/16W (1/BW) | 001-047251-016 | 2 |
| R351 | *CdF RESISTOR 47 Kohm +-5% 1/16W (1/BW) | 001-047351-016 | 1 |
| R379 | RESISTOR 51 Kohm +-5% 1/16W (1/BW) | 001-051351-016 | 1 |
| R357 | RESISTOR 5.6 Kohm +-5% 1/16W (1/BW) | 001-056251-016 | 1 |
| R383 | RESISTOR 68 ohm +-5% 1/16W (1/BW) | 001-068051-016 | 1 |
| CAPACITORS | | | |
| C312 | CERAMIC CAP 0.001 uF/50V +80%-20% | 003-010280-050 | 1 |
| C311 | CERAMIC CAP 0.1 uF/16V +80%-20% | 003-010480-016 | 1 |
| C310 | ELECT CAP 47 MFD/10V +-20% (SMALL SIZE) (5x7) | 006-147000-10D | 1 |
| INTEGRATED CIRCUIT | | | |
| IC304 | ICDISPLAYDRIVER-VFD PT6311/PT6318 (ANGUS) TP6311Q | 010-146311-001 | 1 |
| SWITCHES | | | |
| SW301,302,303,304,305,306,307, 309,311 | TACT SWITCH 4P 5mm 100G #1102A-4/ EVQ PAC 05R (=021-KHH901-000) | 021-110200-002 | 9 |
| WIRES | | | |
| | JP WIRE AWG26#1007 3x3mm 160mm BLACK HSG CD363-4A PIN JST PHR 2mm w/250mm RED BLK,WHT,BLUE JP AWG28#1007 SLDG 4mm HSG CD668R-10 JST PHR 2mm WITH 250mm RED BK,W,Y,BL,OR,R,BK,W,Y AWG28#1095 SLDG4mm | 051-673160-009 136-040363-200 136-100668-200 | 1 1 1 |
| MISCELLANEOUS | | | |
| LED302,303,304 | LED-G-2X5M-N-&&&-&& SE-6221AT 2x5mm GREEN, 21mm LEAD | 110-003421-205 | 3 |
| LED301 | LED-G-2X5&-S-&&&-&& W25319GSC 2x5mm GREEN SUPER BRIGHT | 110-253191-215 | 1 |
| SR301 | REMOTE/CONTROL PHOTO RECEIVER ROHM/RPM7138-V4 | 111-007138-000 | 1 |
| VFD301 | VFD-2COL100x20.5SM-033P VACUUM FLUORESCENT DISPLAY #VFD20-1002 (ZEC) *CdF SOLDERING LUG | 115-001002-000 137-300000-000 | 1 1 |
| LINEAR PORTION | | | |
| RESISTORS | | | |
| R822 | *CdF RESISTOR 10 ohm +-5% 1/16W (1/BW) | 001-010051-016 | 1 |
| R828 | *CdF RESISTOR 1 Kohm +-5% 1/16W (1/BW) | 001-010251-016 | 1 |
| R805,807,808,812,813,814,817, 818,830,843 | *CdF RESISTOR 10 Kohm +-5% 1/16W (1/BW) | 001-010351-016 | 10 |
| R820 | *CdF RESISTOR 100 Kohm +-5% 1/16W (1/BW) | 001-010451-016 | 1 |
| R811 | RESISTOR 1.8 Kohm +-5% 1/16W (1/BW) | 001-018251-016 | 1 |
| R802,815 | *CdF RESISTOR 220 ohm +-5% 1/16W (1/BW) | 001-022151-016 | 2 |

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| Ref. No. | Description | Mfr's Part No. | Qty. |
|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|----------------|------|
| R803 | *CdF RESISTOR 22 Kohm ±5% 1/16W (1/8W) | 001-022351-016 | 1 |
| R821,823,825 | *CdF RESISTOR 33 ohm ±5% 1/16W (1/8W) | 001-033051-016 | 3 |
| R804,816,826,827 | *CdF RESISTOR 470 ohm ±5% 1/16W (1/8W) | 001-047151-016 | 4 |
| R801,819,844 | *CdF RESISTOR 4.7 Kohm ±5% 1/16W (1/8W) | 001-047251-016 | 3 |
| R809,829 | RESISTOR 5.6 Kohm ±5% 1/16W (1/8W) | 001-056251-016 | 2 |
| R810 | RESISTOR 680 ohm ±5% 1/16W (1/8W) | 001-068151-016 | 1 |
| CAPACITROS | | | |
| C815,816 | CERAMIC CAP 0.1 uF/16V +80%-20% | 003-010480-016 | 2 |
| C801,802,803,804,805,806,807, 808,810,812,814,818,821,826, 829,831,833,835,837,845 | CERAMIC CAP 0.02 uF/50V +80%-20% | 003-020380-050 | 20 |
| C843,844 | ELECT CAP 4.7 MFD/50V ±20% (5x11) | 006-004000-50D | 2 |
| C827,840,848,851,852,854 | ELECT CAP 10 MFD/50V ±20% (5x11) | 006-010000-50D | 6 |
| C817 | ELECT CAP 100 MFD/25V ±20% (6.3x11) | 006-010100-25D | 1 |
| C813 | ELECT CAP 100 MFD/35V ±20% (8x11.5) | 006-010100-35D | 1 |
| C846,849,853 | ELECT CAP 1000 MFD/10V ±20% (10x16) | 006-010200-10D | 3 |
| C820,832,838 | ELECT CAP 220 MFD/16V ±20% (8x11.5) | 006-022100-16D | 3 |
| C834,839 | ELECT CAP 220 MFD/25V ±20% (8x11.5) | 006-022100-25D | 2 |
| C830 | ELECT CAP 2200 MFD/10V ±20% (VX/12.5x20) | 006-022200-10C | 1 |
| C809,825 | ELECT CAP 2200 MFD/16V ±20% (12.5x25) | 006-022200-16D | 2 |
| C811 | ELECT CAP 3300 MFD/25V ±20% (16x31.5) | 006-033200-25D | 1 |
| C819,836 | *CdF ELECT CAP 47 MFD/16V ±20% (5x11) | 006-047000-16D | 2 |
| C847 | ELECT CAP 47 MFD/25V ±20% (5x11) | 006-047000-25D | 1 |
| C850 | ELECT CAP 470 MFD/10V ±20% (8x11.5) | 006-047100-10D | 1 |
| TRANSISTORS | | | |
| Q807,815 | TR PNPSST-RAD&SC-043 2SA1015-GR TOSHIBA (F008-211850-005) TRANSISTOR 2SB1566E/F (ROHM) | 008-110150-000 | 2 |
| Q806,814 | TRLNPNSST-TAP&TO-092 3DG1815 | 008-201566-000 | 2 |
| Q801,805,813 | TRLNPNPWR-TAP&TO-092 3DA8050 | 008-618150-000 | 3 |
| Q808 | TRLNPNPWR-TAP&TO-092 3CA8550 | 008-680500-000 | 1 |
| Q809 | TRLPNPPR-TAP&TO-092 3CA8550 | 008-685500-000 | 1 |
| Q804,812 | TR PNPGEN-TAP&SC-072 DTA123ESA (ROHM) (88-WA2-662-08) | 008-800123-003 | 2 |
| Q802,803,811 | TR PNPSST-RAD&SC-072 DTC114ES (ROHM) | 008-801141-000 | 3 |
| INTEGRATED CIRCUITS | | | |
| IC801 | (F010-207805-001) TR &&VOL-REG&TO-092 LM78L05ACZ 5V VOLTAGE REGULATOR | 008-V07805-000 | 1 |
| IC802,803 | ICREGULA-P-005V001A BA05ST (ROHM) | 010-400005-002 | 2 |
| DIODES | | | |
| D810,811,815,816,817,818,822, 823 | DIODE IN-4148 ROHM/TELEFUNKEN TAP**50 KEL(NS)(TAP:52mm)/NS(FAIRCHILD)/SEMTECH | 011-004148-000 | 8 |
| DZ801 | ZENER DIODE #MTZJT-7224D 24V 1/2W | 011-010024-120 | 1 |
| DZ802 | ZENER IN-5231B, HZ5C1, 5.1V, 1/2W | 011-010051-120 | 1 |
| DZ807 | ZENER DIODE 6.2V #MTZJ6.2C | 011-010062-005 | 1 |
| DZ803,804,806 | ZENER DIODE 10V #MTZJ10D 1/2W (ROHM) | 011-010100-122 | 3 |
| D809,819,820,821,824,825,826, 827,828 | RECTIFIER IN-4001B | 011-024001-000 | 9 |
| D801,802,803,804 | (F011-005401-000) RECTIFIER IN-5401BL | 011-025401-000 | 4 |
| D805,806,807,808 | RECTIFIER IN5822 | 011-025822-000 | 4 |
| SWITCH | | | |
| | PUSH SWITCH 2P2T PS3-22SP-W4CW-3.2 w/UL,VDE SEMKO APPROVAL (LUP FUNG) | 021-032222-000 | 1 |
| INDUCTOR | | | |
| L601 | *CdF FERRITE BEAD INDUCTOR #BL01RN1-A62 0.45 uH/7A (5x3.6mm) (87-008-372-01) | 032-101162-000 | 1 |
| MISCELLANEOUS | | | |

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| Ref. No. | Description | Mfr's Part No. | Qty. |
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| | PT003WEI35/14&&WEN& 230V:12.4V EN STD w/o FUSE (P3512-A14E) | 123-A33032-100 | 1 |
| | PT035WEI57/35&F&WVDE 230V:8V/13V/22V/ 4.2V w/FUSE 130°C (L5735-P01E) | 123-D53521-400 | 1 |
| F804,805 | MICRO FUSE #251.630 630mA/125V WFF-215.630 | 124-006310-000 | 2 |
| FS802,803 | *CdF FUSE #S5.6 2.5A/250V 5x20mm TIME LAG (CUL/VDE/SEMKO/BSI APP.) | 124-025020-001 | 2 |
| RL801 | RELAY 9V SDT-S-109LMR | 128-090109-000 | 1 |
| | PLA-ULN-705*VDE-MG VDE APP.CORD 2250mm MIGRATION (HARVEST) | 134-B11331-006 | 1 |
| CN806 | •CdF HEADER MOLEX 4 PINS 5267-04A PITCH 2.5mm STRAIGHT TYPE | 135-005267-040 | 1 |
| CN801 | HEADER MOLEX 5 PINS 5267-05A PITCH 2.5mm STRAIGHT TYPE | 135-005267-050 | 1 |
| CN803 | PIN HEADER 2 PINS TJC6-02P3 PITCH:7.92mm VERTICAL 1.14mm SQUARE PIN | 135-00TJC6-020 | 1 |
| WH803 | HEADER CTL 4 PINS PHS-04 PITCH 2mm STRAIGHT TYPE WHT COLOR (MARKING:HR) | 135-PHS040-040 | 1 |
| WIRES | | | |
| TH3 TO C813+ | JP WIRE AWG26#1007 5x5mm 180mm BLACK | 051-675180-009 | 1 |
| CN805 TO WH502 | HSG (2mm) JST PHR-08 TO 8P-SAN w/180mm RED,BLACKx7 AWG26#UL1007 | 136-F00818-001 | 1 |
| WH801 | HSG (2.5mm) PEC 2507H-09 TO 2501H-09 w/350mm WHITE,GREYx8 AWG24#UL1007 | 136-J10935-001 | 1 |
| MPEG+SERVO PORTION | | | |
| RESISTORS | | | |
| R10,12,230 | CHIP RESISTOR 10 ohm ±5% 1/16W (0603/1608) | 001-310052-016 | 3 |
| R1,109,132 | CHIP RESISTOR 100 ohm ±5% 1/16W (0603/1608) | 001-310152-016 | 3 |
| R14,29,39,58,100,101,120,153, 177,227,229,234,236,237,241, 243, FB18,19,20 | CHIP RESISTOR 0 ohm ±5% 1/16W (0603/1608) | 001-300052-016 | 19 |
| R9,11,97,106,107,122,134,135, 232 | CHIP RESISTOR 1 Kohm ±5% 1/16W (0603/1608) | 001-310252-016 | 9 |
| R5,6,19,20,21,22,23,56,95,102, 123,124,128,130,131,141,142,143, 144,145,146,147,148,157,163,200 | CHIP RESISTOR 10 Kohm ±5% 1/16W (0603/1608) | 001-310352-016 | 26 |
| R31,47,48,91,94,201,202,203,204 | CHIP RESISTOR 100 Kohm ±5% 1/16W (0603/1608) | 001-310452-016 | 9 |
| R32,33,34,35 | CHIP RESISTOR 1 ohm ±5% 1/16W (0603/1608) | 001-310852-016 | 4 |
| R180,183,188,191,194,197 | CHIP RESISTOR 12 Kohm ±5% 1/16W (0603/1608) | 001-312352-016 | 6 |
| R125,218,219 | CHIP RESISTOR 180 ohm ±5% 1/16W (0603/1608) | 001-318152-016 | 3 |
| R208,209,212,213,216,217 | CHIP RESISTOR 2 Kohm ±5% 1/16W (0603/1608) | 001-320252-016 | 6 |
| R164 | CHIP RESISTOR 22 ohm ±5% 1/16W (0603/1608) | 001-322052-016 | 1 |
| R15,16,206,207,210,211,214,215 | CHIP RESISTOR 220 ohm ±5% 1/16W (0603/1608) | 001-322152-016 | 8 |
| R223 | CHIP RESISTOR 2.2 Kohm ±5% 1/16W (0603/1608) | 001-322252-016 | 1 |
| R24,25,26,30,50,105 | CHIP RESISTOR 22 Kohm ±5% 1/16W (0603/1608) | 001-322352-016 | 6 |
| R231 | CHIP RESISTOR 2.4 Kohm ±5% 1/16W (0603/1608) | 001-324252-016 | 1 |
| R182,185,190,193,196,199 | CHIP RESISTOR 30 Kohm ±1% 1/16W (0603/1608) | 001-330312-016 | 6 |
| R59,65,66,67,68,69,70,71,73,74, 75,77,79,80,110,111,127,128,165, 166,167,168,169,170,171,175 | CHIP RESISTOR 33 ohm ±5% 1/16W (0603/1608) | 001-333052-016 | 26 |
| R129,224 | CHIP RESISTOR 330 ohm ±5% 1/16W (0603/1608) | 001-333152-016 | 2 |
| R3,4,52,53,54,55,60,181,184,192, 195,198 | CHIP RESISTOR 3.3 Kohm ±5% 1/16W (0603/1608) | 001-333252-016 | 13 |
| R155 | CHIP RESISTOR 392 ohm ±1% 1/16W (0603/1608) | 001-339112-016 | 1 |
| R13,205 | CHIP RESISTOR 470 ohm ±5% 1/16W (0603/1608) | 001-347152-016 | 2 |

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| Ref. No. | Description | Mfr's Part No. | Qty. |
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| R17,18,43,45,61,96,104,112,113, 114,115,116,117,118,119,133, 139,140,174 | CHIP RESISTOR 4.7 Kohm ±5% 1/16W (0603/1608) | 001-347252-016 | 19 |
| R27,51,57,76,93,98,137,138,154 | CHIP RESISTOR 47 Kohm ±5% 1/16W (0603/1608) (MCR03EZHZ-473) | 001-347352-016 | 9 |
| R222 | CHIP RESISTOR 470 Kohm ±5% 1/16W (0603/1608) | 001-347452-016 | 1 |
| R136 | CHIP RESISTOR 5.6 Kohm ±5% 1/16W (0603/1608) | 001-356252-016 | 1 |
| R186,187 | CHIP RESISTOR 68 ohm ±5% 1/16W (0603/1608) (TSB#G5101100Y101) | 001-368052-016 | 2 |
| R158,159,160,161 | CHIP RESISTOR 75 ohm ±1% 1/16W (0603/1608) (TSB#G5101104G105) | 001-375012-016 | 4 |
| R149,162 | CHIP RESISTOR 75 ohm ±5% 1/16W (0603/1608) | 001-375052-016 | 2 |
| R8 | CHIP RESISTOR 8.2 Kohm ±5% 1/16W (0603/1608) | 001-382252-016 | 1 |
| R225 | CHIP RESISTOR 91 ohm ±5% 1/16W (0603/1608) | 001-391052-016 | 1 |
| CAPACITORS | | | |
| C11,16,39,44,52,53 | CHIP CAP 0.001 uF/25V ±10% (0603/1608) (GRM39B102K50) (MURATA) | 003-510212-025 | 6 |
| C112 | CHIP CAP 0.01 uF/25V ±10% (0603/1608) (MCH185C103KK/GRM39X7R103K25PT) | 003-510312-025 | 1 |
| C135,137,141,143,147,149 | CHIP CAP 0.0022 uF/50V ±10% (0603/1608) (UMK107B222KZ-TM) | 003-522212-050 | 6 |
| C66 | CHIP CAP 0.022 uF/25V ±10% (0603/1608) (MCH182C223KK/GRM39X7R223K25PT) | 003-522312-025 | 1 |
| C2,8,9,10,14,15,21,22,23,24,25, 26,27,28,29,30,31,32,33,34,35,36, 37,38,40,41,42,43,49,50,51,54,55, 56,59,62,63,64,65,68,69,71,72,73, 74,75,78,79,80,82,84,85,86,87,92, 95,96,97,98,99,100,101,102,103, 104,105,106,107,108,113,114,115, 117,118,119,120,121,122,123,124, 128,129,130,133,134,139,140,145, 146,151,152,153,166,171 | CHIP CAP 0.1 uF/16V ±10% (0603/1608) (87-A10-260-08G) (C1608JB1C104K) (TDK) | 003-510412-016 | 94 |
| C83 | CHIP CAP 0.22 uF/16V +80-20% (0603/1608) | 003-522482-016 | 1 |
| C144 | CHIP CAP 0.033 uF/25V ±10% (0603/1608) | 003-533312-025 | 1 |
| C17,47 | CHIP CAP 0.047 uF/25V ±10% (0603/1608) | 003-547312-025 | 2 |
| C48 | CHIP CAP 0.47 uF/16V +80-20% (0603/1608) (EMK107F-474ZA) | 003-547482-016 | 1 |
| C1,4,5,6,7 | CHIP CAP 680 pF/50V ±10% (0603/1608) | 003-568112-050 | 5 |
| C12 | CHIP CAP 0.0068 uF/50V ±10% (0603/1608) | 003-568212-050 | 1 |
| C3,13,131,132 | (F003-610112-050) CHIP CAP 100 pF/50V ±5% NPO (0603/1608) | 003-610152-050 | 4 |
| C57,58,67 | CHIP CAP 12 pF/50V ±5% NPO (0603/1608) | 003-612052-050 | 3 |
| C136,138,142,148,150 | CHIP CAP 150 pF/50V ±5% NPO (0603/1608) (GRM39COG151J50PT/MCH185A151JK) | 003-615152-050 | 5 |
| C88,89,90,91,116,156,159,162 165 | (F003-622051-050) CHIP CAP 22 pF/50V ±5% NPO (0603/1608)(GRM39COG220J50PT) | 003-622052-050 | 9 |
| C111 | CHIP CAP 220 pF/50V ±5% NPO (0603/1608) (UMK107CH221JZ-T) | 003-622152-050 | 1 |
| C109,110 | (F003-527012-050) CHIP CAP 27 pF/50V ±5% NPO (0603/1608) (UMK107CH270JZ-TM) | 003-627052-050 | 2 |
| C154,157,160,163 | CHIP CAP 270 pF/50V ±5% NPO (0603/1608) | 003-627152-050 | 4 |
| R2 | CHIP CAP 33 pF/50V ±5% NPO (0603/1608) (GRM39COG330J50PT/MCH185A330JK) | 003-633052-050 | 1 |
| C70 | CHIP CAP 47 pF/50V ±5% NPO (0603/1608) | 003-647052-050 | 1 |

ELECTRICAL PARTS LIST - CONTINUED

| Ref. No. | Description | Mfr's Part No. | Qty. |
|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|----------------|------|
| C155,158,161,164 | (F003-633151-050) CHIP CAP 330 pF/50V ±5% NPO (0603/1608) (GRM39C0G331J50PT) | 003-633152-050 | 4 |
| C45,46 | CHIP CAP 470 pF/50V ±5% NPO (0603/1608) | 003-647152-050 | 2 |
| CE39,40 | ELECT CAP 4.7 MFD/50V ±20% (5x11) | 006-004000-50D | 2 |
| CE13,18,22,24,E25,26,29,30,31, 32,33,34,35,36,37,38 | ELECT CAP 10 MFD/50V ±20% (5x11) | 006-010000-50D | 16 |
| CE5,6,27,28,45 | ELECT CAP 100 MFD/16V ±20% (5x11) | 006-010100-16D | 5 |
| CE16 | *CdF ELECT CAP 1000 MFD/10V ±20% (VX/10x12) | 006-010200-10C | 1 |
| CE41 | ELECT CAP 220 MFD/16V ±20% (6.3x11) (SA16V221M) | 006-022101-16D | 1 |
| CE3,15,42,44 | ELECT CAP 47 MFD/25V ±20% (5x11) | 006-047000-25D | 4 |
| CE14 | ELECT CAP 470 MFD/10V ±20% (8x11.5) | 006-047100-10D | 1 |
| CE4,8 | ELECT CAP 470 MFD/16V ±20% (VX/10x12.5) | 006-047100-16C | 2 |
| CE49,51,52,53,54 | ELECT CAP 100 MFD/6.3V ±20% (SMALL SIZE) (5x7) | 006-210100-06D | 5 |
| TRANSISTORS | | | |
| Q4,7,8,9,10,11,12 | TR NPNGEN-BUK&SC-043 2N3904 | 008-939040-000 | 7 |
| Q5,6 | TR NPNGEN-BUK&SC-043 2N3906 | 008-939060-000 | 2 |
| Q3 | CHIP TRANSISTOR DTC124TKA-TLB | 008-A00124-B00 | 1 |
| Q1,2 | TR PNPPWR-TAP&S-MT & 2SB1197K-T146R (SMT) (ROHM) | 008-A01197-000 | 2 |
| INTEGRATED CIRCUITS | | | |
| U7 | ICMCU-512K-NIL W29EE512P-70 (WINBOND) | 010-032951-001 | 1 |
| U25 | ICSPECIAL WM8739EDS 24BIT 96kHz STEREO AUDIO ADC | 010-038739-000 | 1 |
| U31 | ICSPECIAL WM8746EDS 32BIT 192KHz 6CH DAC w/VOLUME CONTROL | 010-038746-000 | 1 |
| U9 | IC-VOLTAGE REGULATOR XC61AN1902MR/XC61CN1902MR | 010-151902-000 | 1 |
| U1 | IC-RF AMP M5703T (SP3721AAA-OPM) (64-PIN VQFP) | 010-245703-000 | 1 |
| U5 | IC&&&&&&&&&& M5705 DVD-ROM CONTROLLER (176-PIN LQFP) | 010-245705-000 | 1 |
| U22,23,24 | ICAMP-OP-02CH-DUALV NJM4580E-T1 (TSB#G5147100L105) | 010-274580-002 | 3 |
| U17 | ICRAMS-01X016M K4S161622D-TC/L60/L80 HY57V161610DTC-8/M12L1616A-7T | 010-310416-002 | 1 |
| U3 | ICREGULA-P-3.3V001A BA033FP(SOP) (ROHM) | 010-400033-000 | 1 |
| U29 | ICREGULA-P-005V001A BA17805FP (TO252-3) (ROHM) | 010-401780-000 | 1 |
| U2 | ICMOTORDRIVER-04CH BA5983FM (ROHM) | 010-405983-000 | 1 |
| U12 | ICRAMF-01X001K S-24C01BFJ-TB-01/24LC01BT-I/SN/M24C01-WMN6T/BR24C01AF-WE2 | 010-512401-001 | 1 |
| U27 | ICREGULA-P-&&V&&A LD1117S/LM1117MPX RT9164CG(SOT-223) (ST/NATIONAL/RICHTEK) | 010-721117-000 | 1 |
| U28 | ICREGULA-P-3.3V&&A LD1117S33C/LM1117MPX -3.3/RT9164-33CG (ST/NATIONAL/RICHTEK) | 010-721117-001 | 1 |
| U4 | ICMOTORDRIVER-&CH FAN8082 (FAIRCHILD) | 010-748082-000 | 1 |
| U26 | ICLOGIC TC74HCU04AF-EL HEX INVERTER (TSB#G51451014108) | 010-847404-001 | 1 |
| U11 | ICDIALER-NON-00 ZR36705TQC (ZORAN) ATAPI INTERFACE | 010-893670-002 | 1 |
| U13 | ICRAMF-01X008M 8 BIT (512Kx16) FLASH RAM SST39VF800A-70-4C-EK/SST39VF800-70-4C-EK (F010-474116-000) IC-DRAM M11B416256A-35J (SOJ) (SW034) | 010-993908-000 | 1 |
| U6 | 045-D00035-100 | 1 | |

ELECTRICAL PARTS LIST - CONTINUED

| Ref. No. | Description | Mfr's Part No. | Qty. |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------|
| U16 | ICMPEG ZR36732PQC | 010-893673-000 | 1 |
| DIODES | | | |
| ZD1 | ZENER DIODE 6.8V #MTZJ6.8B | 011-010068-001 | 1 |
| D10 | RECTIFIER IN-4002,100V | 011-024002-990 | 1 |
| D1,2,3,4,5,6,7 | CHIP DIODE (SMT) RLS4148 (ROHM) | 011-044148-000 | 7 |
| INDUCTORS | | | |
| L2,4,5,13 | *CdF INDUCTOR 10 uH CEC-100K +-10% | 018-010016-000 | 4 |
| L26,27,28,29 | C.COIL 1.8uH +-10% TAPE&REEL LK1608 1R8K-T/ MGFI1608C1R8/SDFL1608Q1R8KT | 018-040187-002 | 4 |
| L6 | C.COIL 2.7 uH +-10% TAPE&REEL LK2125 2R7K-T/ MGFI2012C2R7/SDFL2012Q2R7KT | 018-040277-001 | 1 |
| FB1,2,3,4,5,6,7,8,9,10,11,12,13, 14,15,16,21 | FERRITE BEAD #BLM11A102S (MURATA) | 032-111102-000 | 17 |
| CRYSTALS & RESONATOR | | | |
| Y3 | CRYSTAL 12.5 MHz +-30ppm HC-49/U/ALCCBEG | 009-612500-000 | 1 |
| Y4 | CRYSTAL 27 MHz HC-49/U/ALCCGBE | 009-627000-003 | 1 |
| Y1 | RESONATOR 33.8688 MHz 30ppm-50ppm ZTA33.86MX (CHEQUERS) | 020-338688-000 | 1 |
| WIRES | | | |
| U2 GND TO U29 GND | FFC CABLE L=240mm P=1mm SEPH02-01960(3) 24P-4+232+4-P1-CF/90 UL2896 0.035x0.7 | 040-240240-100 | 1 |
| J3 | *CdF JP WIRE AWG26#1007 3x3mm 70mm BLACK HSG (2mm) JST PHR-05 TO PHR-05 w/258mm BR, RED,ORN,YEL,GN AWG28#UL1095 | 051-673070-009 | 1 |
| J2 | HSG (2mm) JST PHR-06 TO PHR-06 w/188mm BR, RED,ORN,YEL,GN,BL AWG28#UL1095 | 136-C00618-800 | 1 |
| MISCELLANEOUS | | | |
| J5 | HEADER MOLEX 6 PINS 5267-06A PITCH 2.5mm STRAIGHT TYPE | 135-005267-060 | 1 |
| J10 | FFC CONN 6232 22 PINS w/o LOCK PITCH:1mm 00 6232 022 006 800 VERTICAL TYPE | 135-006232-220 | 1 |
| J1 | FFC CONNECTOR 24 PINS PITCH:1mm LG BRAND GF106-24S-LS HORIZONTAL UPPER CONTACT | 135-0GF106-240 | 1 |
| J6 | HEADER 4 PINS PEC #2507-WS-4 PITCH 2.5mm VERTICAL REPLACE:135-005267-040 | 135-2507WS-040 | 1 |
| J9 | HEADER 9 PINS PEC #2507-WS-9 PITCH 2.5mm VERTICAL REPLACE:135-005267-090 | 135-2507WS-090 | 1 |
| J3 | HEADER CTL 5 PINS PHS-05 PITCH 2mm STRAIGHT TYPE WHT COLOR (MARKING:HR) | 135-PHS050-050 | 1 |
| J2 | *CdF HEADER CTL 6 PINS PHS-06 PITCH 2mm STRAIGHT TYPE WHT COLOR (MARKING:HR) | 135-PHS060-060 | 1 |
| DVD MECHANISM - STSD-010SMT | | | |
| CN1 | DVD-FLC-01-SAMG-N DVD MECHANISM FOR CD-R CMS-S21MG6 (SAMSUNG) LEAF SWITCH LS-121-0A (LUP FUNG) CONN PIN 3 PINS (3.5+58+3.5) PITCH 2mm UL AWG26#2651 (F135-2001WR-051) HEADER 5 PINS #A2001WR2-05/2001-WR-5 P:2mm HORIZONTAL MOTOR-DC-006V-NORMAL 6V #RF-500TB-12560 (MABUCHI) 10gm (KSM-2101-ABM-AL) | 163-000216-000 022-001210-001 050-030065-200 135-2001WR-050 151-061256-000 | 1 1 1 1 1 |
| RDS PORTION | | | |
| RESISTORS | | | |
| R458 | CHIP RESISTOR 1 Kohm +-5% 1/16W (0603/1608) | 001-310252-016 | 1 |
| R471 | CHIP RESISTOR 18 Kohm +-5% 1/16W (0603/1608) | 001-318352-016 | 1 |

ELECTRICAL PARTS LIST - CONTINUED

| Ref. No. | Description | Mfr's Part No. | Qty. |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|--------|
| R454,456 | CHIP RESISTOR 2.2 Kohm +-5% 1/16W (0603/1608) | 001-322252-016 | 2 |
| R457 | CHIP RESISTOR 330 Kohm +-5% 1/16W (0603/1608) | 001-333452-016 | 1 |
| R455 | CHIP RESISTOR 470 Kohm +-5% 1/16W (0603/1608) | 001-347452-016 | 1 |
| R453 | CHIP RESISTOR 560 ohm +-5% 1/16W (0603/1608) | 001-358152-016 | 1 |
| CAPACITORS | | | |
| C459 | CHIP CAP 0.1 uF/16V +-10% (0603/1608) (87-A10-260-08G) (C1608JB1C104K) (TDK) | 003-510412-016 | 1 |
| C454 | CHIP CAP 0.0022 uF/50V +-10% (0603/1608) (UMK107B222KZ-TM) | 003-522212-050 | 1 |
| C456 | CHIP CAP 0.047 uF/25V +-10% (0603/1608) | 003-547312-025 | 1 |
| C452,453 | CHIP CAP 0.022 uF/25V +-10% (0603/1608) (MCH182C223KK/GRM39X7R223K25PT) | 003-522312-025 | 2 |
| C460 | CHIP CAP 560 pF/50V +-10% (0603/1608) | 003-556112-050 | 1 |
| C457,458 | CHIP CAP 33 pF/50V +-5% NPO (0603/1608) (GRM39COG330J50PT/MCH185A330JK) | 003-633052-050 | 2 |
| C461 | ELECT CAP 2.2 MFD/50V +-20% (5x11) | 006-002000-50D | 1 |
| C451 | ELECT CAP 100 MFD/10V +-20% (5x11) | 006-010100-10D | 1 |
| TRANSISTORS | | | |
| Q412,413 | TR NPNSST-RAD&SC-059 2SC2712GR (89-327-125-08) | 008-A02712-000 | 2 |
| CRYSTAL | | | |
| CX402 | CRYSTAL 4.332 MHz CSA309 CL=16pF CITIZEN (87-A70-091-01G) | 009-604332-000 | 1 |
| INTEGRATED CIRCUIT | | | |
| IC403 | ICRDS DECODER BU1923F (ROHM) | 010-351923-001 | 1 |
| DIODES | | | |
| DZ402 | ZENER IN-5231B, HZ5C1, 5.1V, 1/2W | 011-010051-120 | 1 |
| INDUCTOR | | | |
| L402 | *CdF INDUCTOR 100 uH /1128/CEC-101K+-10% LAL03 TB 101K | 018-010014-000 | 1 |
| SCART PORTION | | | |
| RESISTORS | | | |
| R715 | *CdF RESISTOR 100 ohm +-5% 1/16W (1/8W) | 001-010151-016 | 1 |
| R717,718,720 | *CdF RESISTOR 10 Kohm +-5% 1/16W (1/8W) | 001-010351-016 | 3 |
| R702,703 | *CdF RESISTOR 12 Kohm +-5% 1/16W (1/8W) | 001-012351-016 | 2 |
| R721 | RESISTOR 2 Kohm +-5% 1/16W (1/8W) | 001-020251-016 | 1 |
| R701,706,722 | RESISTOR 2.7 Kohm +-5% 1/16W (1/8W) | 001-027251-016 | 3 |
| R708,709 | *CdF RESISTOR 33 Kohm +-5% 1/16W (1/8W) | 001-033351-016 | 2 |
| R707,710,711,712,719 | *CdF RESISTOR 4.7 Kohm +-5% 1/16W (1/8W) | 001-047251-016 | 5 |
| CAPACITORS | | | |
| C701,702 | ELECT CAP 0.22 MFD/50V +-20% (VX5x11) | 006-000200-50C | 2 |
| C703,704 | ELECT CAP 10 MFD/50V +-20% (5x11) | 006-010000-50D | 2 |
| C711,712 | ELECT CAP 100 MFD/16V +-20% (5x11) | 006-010100-16D | 2 |
| TRANSISTORS | | | |
| Q701,702,708,709 | TR NPNGEN-BUL&TO-092 3DG9014 (9014) | 008-609014-000 | 4 |
| INDUCTORS | | | |
| FB701,702,703,704,705,706,707 | *CdF FERRITE BEAD INDUCTOR #BL01RN1-A62 0.45 uH/7A (5x3.6mm) (87-008-372-01) FFC CABLE 22 PINS L=200mm 4+192+4 P:1mm UL2896 0.035x0.7 (TUNG HING) | 032-101162-000 040-220200-100 | 7 1 |
| MISCELLANEOUS | | | |
| WH702, J11 | FFC CONN 6232 22 PINS w/o LOCK PITCH:1mm 00 6232 022 006 800 VERTICAL TYPE | 135-006232-220 | 2 |
| JK701 | RGB CONNECTOR SOCKET 21 PINS HRC-021V-07 (KUNMING)/MRC-021V-04 (HONDA) | 135-HRC021-210 | 1 |

ELECTRICAL PARTS LIST - CONTINUED

| Ref. No. | Description | Mfr's Part No. | Qty. |
|-----------------------------------------------|----------------------------------------------------------------------------------|----------------|------|
| TUNER PORTION | | | |
| RESISTORS | | | |
| JP403,404,405,406,407,408,409, 421,423,425 | CHIP RESISTOR 0 ohm +/-5% 1/16W (0603/1608) | 001-300052-016 | 10 |
| R401,410,412,443,444,445,459, 465 | CHIP RESISTOR 1 Kohm +/-5% 1/16W (0603/1608) | 001-310252-016 | 8 |
| R415,430,431 | CHIP RESISTOR 100 ohm +/-5% 1/16W (0603/1608) | 001-310152-016 | 3 |
| R451,461,409 | CHIP RESISTOR 10 Kohm +/-5% 1/16W (0603/1608) | 001-310352-016 | 3 |
| R402,403,435,448 | CHIP RESISTOR 100 Kohm +/-5% 1/16W (0603/1608) | 001-310452-016 | 4 |
| R420 | CHIP RESISTOR 12 Kohm +/-5% 1/16W (0603/1608) | 001-312352-016 | 1 |
| R421,442 | CHIP RESISTOR 18 Kohm +/-5% 1/16W (0603/1608) | 001-318352-016 | 2 |
| R467 | CHIP RESISTOR 22 ohm +/-5% 1/16W (0603/1608) | 001-322052-016 | 1 |
| R406,416 | CHIP RESISTOR 220 ohm +/-5% 1/16W (0603/1608) | 001-322152-016 | 2 |
| R405,422,438 | CHIP RESISTOR 2.2 Kohm +/-5% 1/16W (0603/1608) | 001-322252-016 | 3 |
| R413,417,423 | CHIP RESISTOR 22 Kohm +/-5% 1/16W (0603/1608) | 001-322352-016 | 3 |
| R411,419,424,425,426,427,452 | CHIP RESISTOR 3.3 Kohm +/-5% 1/16W (0603/1608) | 001-333252-016 | 7 |
| R418 | CHIP RESISTOR 3.9 Kohm +/-5% 1/16W (0603/1608) | 001-339252-016 | 1 |
| R404,407 | CHIP RESISTOR 47 ohm +/-5% 1/16W (0603/1608) | 001-347052-016 | 2 |
| R408 | CHIP RESISTOR 470 ohm +/-5% 1/16W (0603/1608) | 001-347152-016 | 1 |
| R428,429,436,447 | CHIP RESISTOR 4.7 Kohm +/-5% 1/16W (0603/1608) | 001-347252-016 | 4 |
| R446 | CHIP RESISTOR 47 Kohm +/-5% 1/16W (0603/1608) (MCR03EZHJ-473) | 001-347352-016 | 1 |
| R414 | CHIP RESISTOR 56 ohm +/-5% 1/16W (0603/1608) | 001-356052-016 | 1 |
| R437 | CHIP RESISTOR 560 ohm +/-5% 1/16W (0603/1608) | 001-356152-016 | 1 |
| R460 | CHIP RESISTOR 5.6 Kohm +/-5% 1/16W (0603/1608) | 001-356252-016 | 1 |
| R466 | CHIP RESISTOR 8.2 Kohm +/-5% 1/16W (0603/1608) | 001-382252-016 | 1 |
| CAPACITORS | | | |
| C421 | CHIP CAP 0.001 uF/50V +/-10% (0603/1608) (MCH185C102KK/GRM39X7R102K50PT) | 003-510212-050 | 1 |
| C403,404,409,410,415 | CHIP CAP 0.01 uF/50V +/-10% (0603/1608) (GRM39B103K50PT) | 003-510312-050 | 5 |
| C418,427,436 | CHIP CAP 0.1 uF/16V +/-10% (0603/1608) (87-A10-260-08G) (C1608JB1C104K) (TDK) | 003-510412-016 | 3 |
| C422,428,429,432,433 | CHIP CAP 0.015 pF/50V +/-10% (0603/1608) | 003-515312-050 | 5 |
| C438 | CHIP CAP 0.0022 uF/50V +/-10% (0603/1608) (UMK107B222KZ-TM) | 003-522212-050 | 1 |
| C402,405,411,414,439,441,444, 466 | CHIP CAP 0.022 uF/50V +/-10% (0603/1608) | 003-522312-050 | 8 |
| C473,476 | CHIP CAP 0.0047 uF/50V +/-10% (0603/1608) | 003-547212-050 | 2 |
| C406 | CHIP CAP 0.047 uF/25V +/-10% (0603/1608) | 003-547312-025 | 1 |
| C423,424 | CHIP CAP 0.47 uF/10V +/-10% (0603/1608) (LMK107BL474KA-T) | 003-547412-010 | 2 |
| C420,448,449 | (F003-610112-050) CHIP CAP 100 pF/50V +/-5% NPO (0603/1608) | 003-610152-050 | 3 |
| C413 | CHIP CAP 15 pF/50V +/-5% NPO (0603/1608) (UMK107CH150JZ-TM) | 003-615052-050 | 1 |
| C446,447 | CHIP CAP 24 pF/50V +/-5% NPO (0603/1608) | 003-624052-050 | 2 |
| C475 | (F003-527012-050) CHIP CAP 27 pF/50V +/-5% NPO (0603/1608) (UMK107CH270JZ-TM) | 003-627052-050 | 1 |
| C412 | POLY CAP 350 pF/50V +/-5% (B351J09P2HH33AAA) | 005-035100-000 | 1 |
| C425,467,468 | ELECT CAP 0.47 MFD/50V +/-20% (5x11) | 006-000400-50D | 3 |
| C417,426,430,431 | ELECT CAP 1 MFD/50V +/-20% (5x11) | 006-001000-50D | 4 |
| C435 | ELECT CAP 10 MFD/50V +/-20% (5x11) | 006-010000-50D | 1 |
| C437,465,470 | ELECT CAP 100 MFD/16V +/-20% (5x11) | 006-010100-16D | 3 |
| C419 | ELECT CAP 22 MFD/25V +/-20% (5x11) | 006-022000-25D | 1 |

ELECTRICAL PARTS LIST - CONTINUED

| Ref. No. | Description | Mfr's Part No. | Qty. |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|------|
| C416,442 | ELECT CAP 220 MFD/10V +/-20% (6.3x11) | 006-022100-10D | 2 |
| C471 | ELECT CAP 220 MFD/16V +/-20% (8x11.5) | 006-022100-16D | 1 |
| C408 | *CdF ELECT CAP 47 MFD/16V +/-20% (5x11) | 006-047000-16D | 1 |
| TC401 | *CdF TRIMMER CAP CVN610 3-10pF WHITE (6x6x5mm) (JIN MYOUNG) | 007-200610-000 | 1 |
| TRANSISTORS | | | |
| Q402 | CHIP NJFET SST201/SST201B-T1 (SILICONIX) 2SK208Y TOSHIBA | 008-A00201-010 | 1 |
| Q409,410 | TR PNPPWR-RAD&SC-059 2SA1036K | 008-A01036-000 | 2 |
| Q403,404,405,411 | TR NPNSST-RAD&SC-059 2SC2712GR (89-327-125-08) | 008-A02712-000 | 4 |
| CRYSTAL | | | |
| CX401 | CRYSTAL 7.2 MHz HC-49/U | 009-607200-000 | 1 |
| INTEGRATED CIRCUITS | | | |
| IC401 | ICRDS TA2099N (TOSHIBA) (87-A21-173-01) | 010-832099-000 | 1 |
| IC402 | ICPLL TC9257F | 010-849257-000 | 1 |
| DIODES | | | |
| VD401,402 | VARI CAP DIODE 1SV149B,TOSHIBA | 011-000149-000 | 2 |
| D401,402,403,404 | DIODE IN-4148 ROHM/TELEFUNKEN TAP**50 KEL(NS)(TAP:52mm)/NS(FAIRCHILD)/SEMTECH | 011-004148-000 | 4 |
| INDUCTORS | | | |
| T408,409 | IFT 7PF022C 7.8mm BLACK | 012-000022-078 | 2 |
| T405 | IFT 7M4A1772R 7.5mm YELLOW 012-001720-075 | 012-001772-075 | 1 |
| T403 | IFT 7M1A1959R 7.5mm RED 012-001905-075 | 012-001959-075 | 1 |
| T401 | IFT 7M1A1961R 7.5mm BLACK 012-001950-075 | 012-001961-075 | 1 |
| INDUCTORS | | | |
| L401,403 | *CdF INDUCTOR 100 uH /1126/CEC-101K +/-10% LAL03 TB 101K | 018-010014-000 | 2 |
| FILTERS | | | |
| CF401,402 | CERAMIC FILTER SFE10.7MS3-A | 019-000107-006 | 2 |
| CF404 | CERAMIC FILTER CDA10.7MG82-A | 019-000107-028 | 1 |
| CF403 | (F019-000450-002) CERAMIC FILTER LTU450G2 | 019-000450-012 | 1 |
| WIRES | | | |
| WH401 TO WH304 | HSG CD170-108 10PINS JST PHR-2mm w/110mm R,BK,W,Y,BL,OR,R,BK,W,Y AWG28#1095 4mm | 136-100170-000 | 1 |
| WH401 TO WH305 | HSG (2mm) PEC 2001H-03 TO 2003H-03 w/225mm SHIELD WIRE AWG28#UL2547/2C RED,WHITE | 136-F10322-500 | 1 |
| MISCELLANOUS | | | |
| | TUNER-FM&&00STATION FM FRONT END TUNER PET-3010F/H (EU) (TAE BONG) | 042-103010-000 | 1 |
| JK401 | JACK COAXIAL JACK HTR-401V HEADER MOLEX 2 PINS 5268-02A PITCH 2.5mm HORIZONTAL TYPE | 118-030401-000 135-005268-020 | 1 |
| CENTER SPEAKER PORTION - SSQC3 | | | |
| | JP WIRE AWG22#1007 5x5mm 130mm RED | 051-275130-006 | 1 |
| | JP WIRE AWG22#1007 5x5mm 130mm BLACK | 051-275130-009 | 1 |
| FOR CT | PUSH TERMINAL BOARD PT-213-03 BLACK,RED MSP-105H-03 BLACK,RED SPK WIRE UL/CSA 2468 2x22 AWG 17/0.16mm TRANS. w/BK LINE 4M w/TUBE 2xRED,BLK,BRN SPK00003*008OHM0050W w/BK DOME PAPER CAP #LF77SZ4307G55C8AS19PDB (GGEC/L0234) | 118-000213-000 122-002120-401 131-308050-010 | 1 |
| ACTIVE SUB-WOOFER PORTION - SWT1A | | | |
| OUTPUT TERMINAL PORTION | | | |
| RESISTORS | | | |

ELECTRICAL PARTS LIST - CONTINUED

| Ref. No. | Description | Mfr's Part No. | Qty. |
|--------------------------------------------------------------------------------|-----------------------------------------------------------------------------|----------------|------|
| R880,881,882 | *CdF RESISTOR 10 ohm +5% 1/16W (1/8W) | 001-010051-016 | 3 |
| R1003 | *CdF RESISTOR 100 ohm +5% 1/16W (1/8W) | 001-010151-016 | 1 |
| R877 | *CdF RESISTOR 10 Kohm +5% 1/16W (1/8W) | 001-010351-016 | 1 |
| R875 | *CdF RESISTOR 22 Kohm +5% 1/16W (1/8W) | 001-022351-016 | 1 |
| R876 | *CdF RESISTOR 3.3 Kohm +5% 1/16W (1/8W) | 001-033251-016 | 1 |
| R873,874 | *CdF RESISTOR 47 Kohm +5% 1/16W (1/8W) | 001-047351-016 | 2 |
| R871 | RESISTOR 56 Kohm +5% 1/16W (1/8W) | 001-056351-016 | 1 |
| CAPACITORS | | | |
| C996 | (F003-010380-025) CERAMIC CAP 0.01 uF/50V +80%-20% | 003-010380-050 | 1 |
| C998 | ELECT CAP 1000 MFD/16V +20% (10x20) | 006-010200-16D | 1 |
| TRANSISTORS | | | |
| Q871,875 | TRLNPNSS-TAP&TO-092 3DG1815 | 008-618150-000 | 2 |
| Q872 | TRLNPNNWR-TAP&TO-092 3CA8550 | 008-685500-000 | 1 |
| DIODES | | | |
| D913,915,916 | DIODE IN-4148 ROHM/TELEFUNKEN TAP**50 KEL(NS)TAP-52mm/NS(FAIRCHILD)/SEMTECH | 011-004148-000 | 3 |
| D914 | RECTIFIER IN-4001B | 011-024001-000 | 1 |
| MISCELLANEOUS | | | |
| JK601,603 | 4 P PUSH TERMINAL BOARD HSP-354V-03 A,B-RED C,D-BLACK (STS5x/STS6x) | 118-000354-000 | 2 |
| JK602 | EXT SP JACK HSP-102V-01 A-RED,B-BLACK (PUSH TERMINAL BOARD) | 118-040102-000 | 1 |
| JK604 | MINI DIN SOCKET MDSL-09SC0A (LEOCO) | 119-000090-000 | 1 |
| RL601,602,603 | RELAY 12V OSA-SS-212DM5 | 128-122125-000 | 3 |
| CN01 | HEADER 2 PINS #TJ6-2A PITCH:3.96mm VERTICAL 1.14mm AQURE PIN | 135-000TJ6-020 | 1 |
| CN02 | HEADER MOLEX 2 PINS 5267-02A PITCH 2.5mm STRAIGHT TYPE | 135-005267-020 | 1 |
| POWER AF PORTION | | | |
| RESISTORS | | | |
| R680,905,915 | RESISTOR 100 ohm, +5%, 1/4W | 001-010150-014 | 3 |
| R632,661,664,665,919,1015,1016 | *CdF RESISTOR 10 Kohm +5% 1/16W (1/8W) | 001-010351-016 | 7 |
| R657,663,687,920 | *CdF RESISTOR 100 Kohm +5% 1/16W (1/8W) | 001-010451-016 | 4 |
| R614,616,631,633,634,907 | RESISTOR 1.8 Kohm, +5%, 1/16W (1/8W) | 001-018251-016 | 6 |
| R924 | *CdF RESISTOR 2.2 Kohm +5% 1/16W (1/8W) | 001-022251-016 | 1 |
| R662 | *CdF RESISTOR 22 Kohm +5% 1/16W (1/8W) | 001-022351-016 | 1 |
| R610,619,622,627,639,912 | (F001-022951-001) RESISTOR 0.22 ohm +5% 1W (METAL FILM) | 001-022952-001 | 6 |
| R1001 | RESISTOR 3.3 Kohm +5% 1/2W | 001-033250-012 | 1 |
| R605,606,666,671,672,673,689, 903,909,910 | *CdF RESISTOR 4.7 Kohm +5% 1/16W (1/8W) | 001-047251-016 | 10 |
| R602,604,675,677,679,682,683, 684,685,686,902,921 | *CdF RESISTOR 47 Kohm +5% 1/16W (1/8W) | 001-047351-016 | 12 |
| R640,642,643,644,645,646,647, 648,649,650,914,917 | RESISTOR 4.7 ohm +5% 1/2W | 001-047850-012 | 12 |
| R641,681 | RESISTOR 56 ohm +5% 1/4W | 001-056050-014 | 2 |
| R658 | RESISTOR 5.6 Kohm +5% 1/16W (1/8W) | 001-056251-016 | 1 |
| R607,611,612,613,615,617,621, 625,629,630,635,636,668,669, 670,901,906,908,916 | RESISTOR 56 Kohm +5% 1/16W (1/8W) | 001-056351-016 | 19 |
| R608,609,618,620,623,624,626, 628,637,638,659,913,918 | *CdF RESISTOR 6.8 Kohm +5% 1/16W (1/8W) | 001-068251-016 | 13 |
| R652,653,654,655,656,923 | *CdF RESISTOR 82 Kohm +5% 1/16W (1/8W) | 001-082351-016 | 6 |
| CAPACITORS | | | |

ELECTRICAL PARTS LIST - CONTINUED

| Ref. No. | Description | Mfr's Part No. | Qty. |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------|
| C605,606,617,619,621 | CERAMIC CAP 220 pF/50V +10% | 003-022110-050 | 5 |
| C601,602,636,637,638,903 | CERAMIC CAP 470 pF/50V +5% (88-211-550-81C) | 003-047150-050 | 6 |
| C916 | SEMI-COND 0.022 uF/25V +10% | 003-322310-025 | 1 |
| C607,610,615,616,623,906 | CERAMIC CAP 3 pF/50V +0.25pF (NPO) (CC45-CH1H030C/RBU04CH030C-L) | 003-430830-050 | 6 |
| C625,626,627,628,629,911 | #MYLAR CAP 0.1 uF/50V +10% | 004-010410-050 | 6 |
| C603,604,633,634,635 | ELECT CAP 1 MFD/50V +20% (5x11) | 006-001000-50D | 5 |
| C630,631,902 | ELECT CAP 10 MFD/50V +20% (5x11) | 006-010000-50D | 3 |
| C613,614,624,905 | ELECT CAP 100 MFD/35V +20% (8x11.5) | 006-010100-35D | 4 |
| C907 | ELECT CAP 1000 MFD/16V +20% (10x20) | 006-010200-16D | 1 |
| C632,917 | ELECT CAP 22 MFD/25V +20% (5x11) | 006-022000-25D | 2 |
| C909,910 | (F006-022200-35D) ELECT CAP 2200 MFD/35V +20% (VX16x31.5) | 006-022200-35C | 2 |
| C611,612 | ELECT CAP 3300 MFD/35V +20% (18x35) | 006-033200-35D | 2 |
| C608,609,618,620,622,904 | *CdF ELECT CAP 47 MFD/16V +20% (5x11) | 006-047000-16D | 6 |
| C908 | ELECT CAP 47 MFD/50V +20% (87-010408-08J) | 006-047000-50C | 1 |
| TRANSISTORS | | | |
| Q611 | TR PNPsST-RAD&TO-092 3CG733P (2SA733P) | 008-600733-000 | 1 |
| Q607 | TR NPNSST-RAD&TO-092 3DG945P (2SC945P) | 008-600945-000 | 1 |
| Q603,604,605,606,608,610,615, 902 | TRLNPNSS-TAP&TO-092 3CG1015 | 008-610150-000 | 9 |
| Q601,602,609,616,617,618,901 | TRLNPNPWR-TAP&TO-092 3DA8050 | 008-618150-000 | 7 |
| Q614 | TR NPNsST-RAD&SC-072 DTC114ES (ROHM) | 008-680500-000 | 1 |
| Q612 | | 008-801141-000 | 1 |
| INTEGRATED CIRCUITS | | | |
| IC601 | ICAMP-POWR-&-00020W STK402-930 (SANYO) (6 CHANNELS AF) | 010-550402-001 | 1 |
| IC901 | ICAMP-POWR-&-00040W STK404-070 (1 CHANNEL AF) | 010-550404-000 | 1 |
| DIODES | | | |
| D601,602,603,604,605,607,901, 906 | DIODE IN-4148 ROHM/TELEFUNKEN TAP**50 KEL(NS)TAP-52mm/NS(FAIRCHILD)/SEMTECH ZENER DIODE MTZJT-72-12B 12V 1/2W (TSB#G51421015104) | 011-004148-000 | 8 |
| ZD901 | | 011-010012-120 | 1 |
| INDUCTORS | | | |
| L601,602,603,604,605,901 | FM COIL 24.5T 4mm/4.0x24.5Tx0.7 RED DIA:0.7mm #CS47-868793/F192829 | 015-245040-007 | 6 |
| MISCELLANEOUS | | | |
| | DIN COAXIAL CABLE #2464 9C+1 DIA:10mm L=5M UL2464-SB 9Cx26AWG (9 PIN) SPK006.5#004OHM0120W w/BK DOME PAPER CAP #SW165RZ5802G100F4AS36PFB (L0257) | 122-004020-500 | 1 |
| | | 131-6540A0-010 | 1 |
| PRE AF PORTION | | | |
| RESISTORS | | | |
| R850,861,862,863,864 | *CdF RESISTOR 10 Kohm +5% 1/16W (1/8W) | 001-010351-016 | 5 |
| R961,962,969,970,976,977 | *CdF RESISTOR 100 Kohm +5% 1/16W (1/8W) | 001-010451-016 | 6 |
| R959,964,967,972,974 | *CdF RESISTOR 12 Kohm +5% 1/16W (1/8W) | 001-012351-016 | 5 |
| R983 | *CdF RESISTOR 15 Kohm +5% 1/16W (1/8W) | 001-015351-016 | 1 |
| R852,854,965,966,973,980,985, 986,991,992 | *CdF RESISTOR 220 ohm +5% 1/16W (1/8W) | 001-022151-016 | 10 |
| R951,952,953,954,955,956,978, 999 | *CdF RESISTOR 2.2 Kohm +5% 1/16W (1/8W) | 001-022251-016 | 8 |
| R981 | *CdF RESISTOR 22 Kohm +5% 1/16W (1/8W) | 001-022351-016 | 1 |
| R960,963,968,971,975,993,994, 995,996,997,998 | *CdF RESISTOR 4.7 Kohm +5% 1/16W (1/8W) | 001-047251-016 | 11 |

ELECTRICAL PARTS LIST - CONTINUED

| Ref. No. | Description | Mfr's Part No. | Qty. |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------|
| R984,982 | RESISTOR 68K +/-5% 1/16W (1/8W) | 001-068351-016 | 2 |
| R950,958,987,988,989,990 | RESISTOR 8.2 Kohm +/-5% 1/16W (1/8W) | 001-082251-016 | 6 |
| R979 | *CdF RESISTOR 82 Kohm +/-5% 1/16W (1/8W) | 001-082351-016 | 1 |
| CAPACITORS | | | |
| C959,960,963,964,966 | CERAMIC CAP 100 pF/50V +/-10% | 003-010110-050 | 5 |
| C981,982,983,984,985,986 | CERAMIC CAP 220 pF/50V +/-10% | 003-022110-050 | 6 |
| C990,991,992,993,994,995 | CERAMIC CAP 30 pF/50V +/-10% | 003-030010-050 | 6 |
| C997 | CERAMIC CAP 0.04 uF/50V +80-20% | 003-040380-050 | 1 |
| C967 | SEMI-COND 0.0056 uF/25V +/-10% Y5P | 003-356210-025 | 1 |
| C973 | #MYLAR CAP 0.012 uF/100V +/-10% | 004-012310-100 | 1 |
| C972 | #MYLAR CAP 0.068 uF/100V +/-10% | 004-068310-100 | 1 |
| C969,970 | ELECT CAP 0.47 MFD/50V +/-20% (5x11) | 006-000400-50D | 2 |
| C951,952,953,954,955,956,957, 958,975,976,977 | ELECT CAP 1 MFD/50V +/-20% (5x11) | 006-001000-50D | 11 |
| C941,978 | ELECT CAP 10 MFD/50V +/-20% (5x11) | 006-010000-50D | 2 |
| C872,875 | ELECT CAP 100 MFD/16V +/-20% (5x11) | 006-010100-16D | 2 |
| C961,962,965,968,971,974,979, 980 | ELECT CAP 220 MFD/16V +/-20% (8x11.5) | 006-022100-16D | 8 |
| C871,874 | ELECT CAP 220 MFD/25V +/-20% (8x11.5) | 006-022100-25D | 2 |
| C873,876 | ELECT CAP 470 MFD/25V +/-20% (10x16) | 006-047100-25D | 2 |
| TRANSISTORS | | | |
| Q851 | TRLNPNPWR-TAP&TO-092 3DA8050 | 008-680500-000 | 1 |
| Q802 | TRLPNPPWR-TAP&TO-092 3CA8550 | 008-685500-000 | 1 |
| INTEGRATED CIRCUITS | | | |
| IC951,952,953,.954 | IC BA4558N O.AMP | 010-404558-000 | 4 |
| DIODES | | | |
| D909 | DIODE IN-4148 ROHM/TELEFUNKEN TAP**50 KEL(NS)TAP:52mm\NS(FAIRCHILD)/SEMTECH | 011-004148-000 | 1 |
| ZD851,852 | ZENER DIODE MTZJT-72-12B 12V 1/2W (TSB#G51421015104) | 011-010012-120 | 2 |
| D910,911 | RECTIFIER IN-4001B | 011-024001-000 | 2 |
| WIRE | | | |
| A TO A' | JP WIRE AWG26#1007 5x5mm 60mm BLACK | 051-675060-009 | 1 |
| RECTIFIER PORTION | | | |
| RESISTOR | | | |
| R859 | *CdF RESISTOR 100 ohm +/-5% 1/16W (1/8W) | 001-010151-016 | 1 |
| CAPACITORS | | | |
| C861,862,863,864,867,868,869, 870 | (F003-010380-025) CERAMIC CAP 0.01 uF/50V +80%-20% | 003-010380-050 | 8 |
| C879,880 | ELECT CAP 100 MFD/50V +/-20% (8x11.5) | 006-010100-50D | 2 |
| C877,878 | ELECT CAP 1000 MFD/25V +/-20% (12.5x20) | 006-010200-25D | 2 |
| DIODES | | | |
| D855,856,857,858 | RECTIFIER 10A1 10A 100V (GW) | 011-020010-990 | 4 |
| D851,852,853,854,859 | RECTIFIER IN-4001B | 011-024001-000 | 5 |
| WIRES | | | |
| CN809 TO CN812 | JP WIRE AWG22#1015 5x5mm 300mm RED | 051-255300-006 | 2 |
| CN813 TO CN01 | JP WIRE AWG22#1015 5x5mm 300mm WHITE | 051-255300-008 | 2 |
| MISCELLANEOUS | | | |
| LED101 | LED-R-3MM&-S-&&&-&&& SE-3001DT 3mm BRIG.RED 28mm LEAD w/REFL. (8C-CS8-619-01) PT300WEI76/56&F&BVDE 230V:24V/24V/13V/ 13V w/FUSE 130°C (L7656-G01E) | 110-030010-003 | 1 |
| FUSE1,2 | FUSE #S506 1.6A/250V 5x20mm TIME LAG. (CUL/SEMKO/VDE/BSI APP.) | 123-F53551-400 | 1 |
| RL806 | RELAY 9V SDT-S-109LMR | 124-016020-000 | 2 |
| | | 128-090109-000 | 1 |

ELECTRICAL PARTS LIST - CONTINUED

| Ref. No. | Description | Mfr's Part No. | Qty. |
|---------------------------------|-----------------------------------------------------------------------------------|----------------|------|
| FUSE3,4 | FUSE #218008 8A/250V 5x20mm TIME-LAG (UL/CSA) (WANTON) | 124-080020-001 | 2 |
| | PLA-ULN-705*VDE-MG VDE APP.CORD 2250mm MIGRATION (HARVEST) | 134-B11331-006 | 1 |
| CN805 | HEADER JMT 3 PINS JM2422-3 PITCH:3.98mm | 135-002422-030 | 1 |
| CN814,817 | HEADER 2 PINS PEC #2507-WS-2 PITCH 2.5mm | 135-2507WS-020 | 2 |
| CN806 | VERTICAL REPLACE:135-005267-020 HEADER 3 PINS PEC #2507-WS-3 PITCH 2.5mm | 135-2507WS-030 | 1 |
| | VERTICAL REPLACE:135-005267-030 | | |
| WIRES | | | |
| CN817 TO A.B | HSG CD228-2A MOLEX 5264 w/300mm RED,BLK | 136-020228-250 | 2 |
| CN814 TO CN820 | AWG26#1007 UL JP SLDG.4mm | | |
| CN02 TO LED101 | HSG CD363-2C PIN MOLEX5264 2.5mm w/600mm RED,BLK JP AWG26#1007 SLDG 4mm | 136-020363-251 | 1 |
| CN806 TO CN807 | HSG AS162-3 MOLEX 5264 WITH 220mm RED, BLUE,BLACK AWG26#1007 JP SLDG 5mm | 136-030162-000 | 1 |
| CN805 TO CN808 | HSG CD2775-3B JMT JP2422-3 w/230mm RED,BLACK,WHITE AWG22#UL1007 SLDG.4mm | 136-032775-390 | 1 |
| CN01 TO SP | HSG (3.96mm) YS TJC6-2Y w/600mm RED,BLACK AWG18#UL1007 SLDG.10mm | 136-MZ0260-000 | 1 |
| 4-SPEAKER PORTION - SSQ3 | | | |
| FOR FR | JP WIRE AWG22#1007 5x5mm 130mm RED | 051-275130-006 | 4 |
| | JP WIRE AWG22#1007 5x5mm 130mm BLACK | 051-275130-009 | 4 |
| | PUSH TERMINAL BOARD PT-213-03 BLACK,RED | 118-000213-000 | 4 |
| | MSP-105H-03 BLACK,RED | | |
| | SPK WIRE UL/CSA 2468 2x22 AWG 17/0.16mm | 122-002120-402 | 1 |
| FOR FL | TRANS.w/BK LINE 4M w/TUBE 2xRED,BLK,YEL | | |
| | SPK WIRE UL/CSA 2468 2x22 AWG 17/0.16mm | 122-002120-403 | 1 |
| FOR SR | TRANS.w/BK LINE 4M w/TUBE 2xRED,BLK,BLU | | |
| | SPK WIRE UL/CSA 2468 2x22 AWG 17/0.16mm | 122-002121-003 | 1 |
| FOR SL | TRANS.w/BK LINE 10M w/TUBE 2xRED,BLK,GRN | | |
| | SPK WIRE UL/CSA 2468 2x22 AWG 17/0.16mm | 122-002121-004 | 1 |
| | TRANS.w/BK LINE 10M w/TUBE 2xRED,BLK,ORN | | |
| | SPK00003'008OHM0050W w/BK DOME PAPER CAP #LF77SZ4307G55C8AS19PDB (GGEC)(L0234) | 131-308050-010 | 4 |

NOTES:

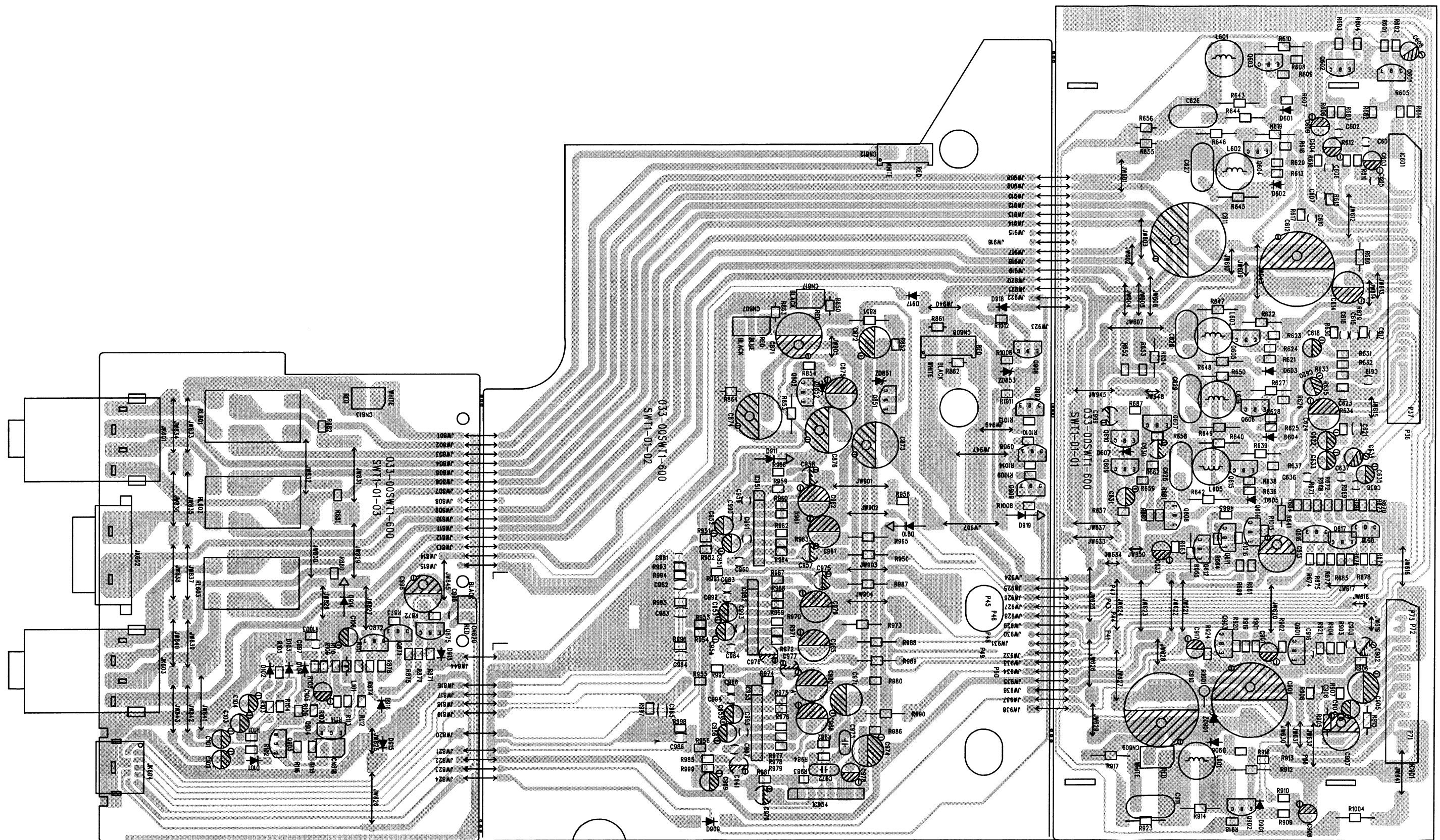
1. * # " Mylar is a registered trademark of E.I. Du Pont de Nemours and Company.

2. △ Symbol in parts list represent safety parts.

PRINTED CIRCUIT BOARDS

POWER AMPLIFIER PCB

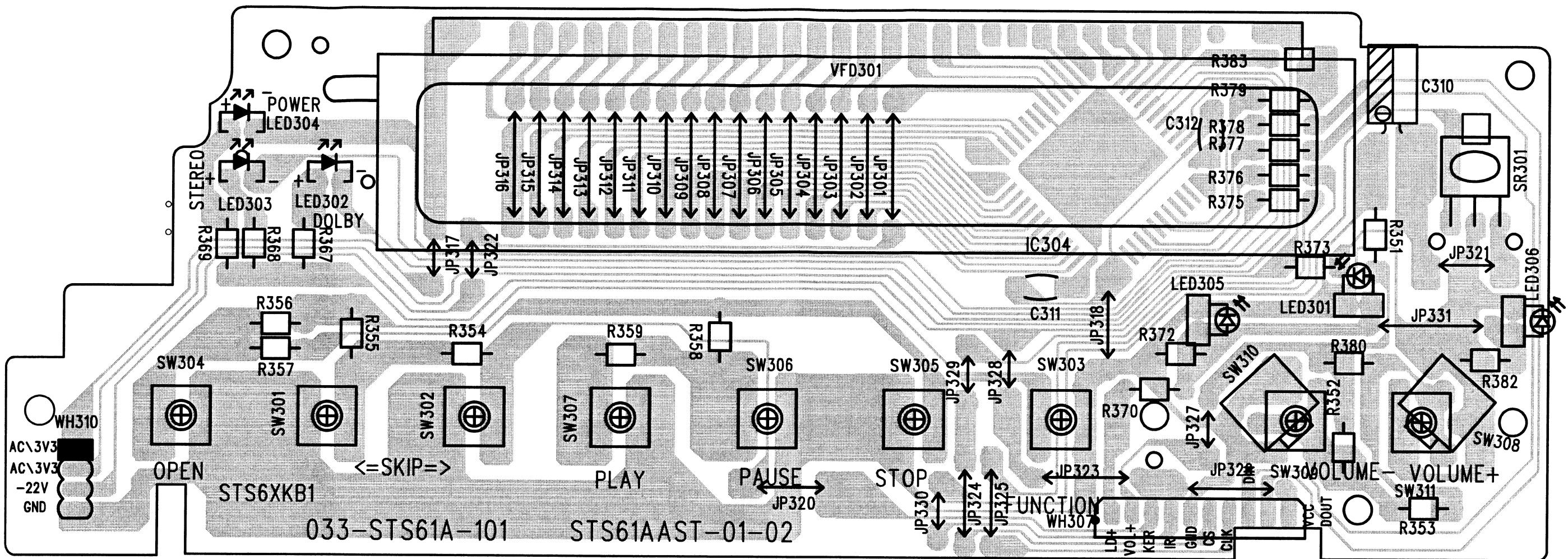
SWT1-01-01,02,03



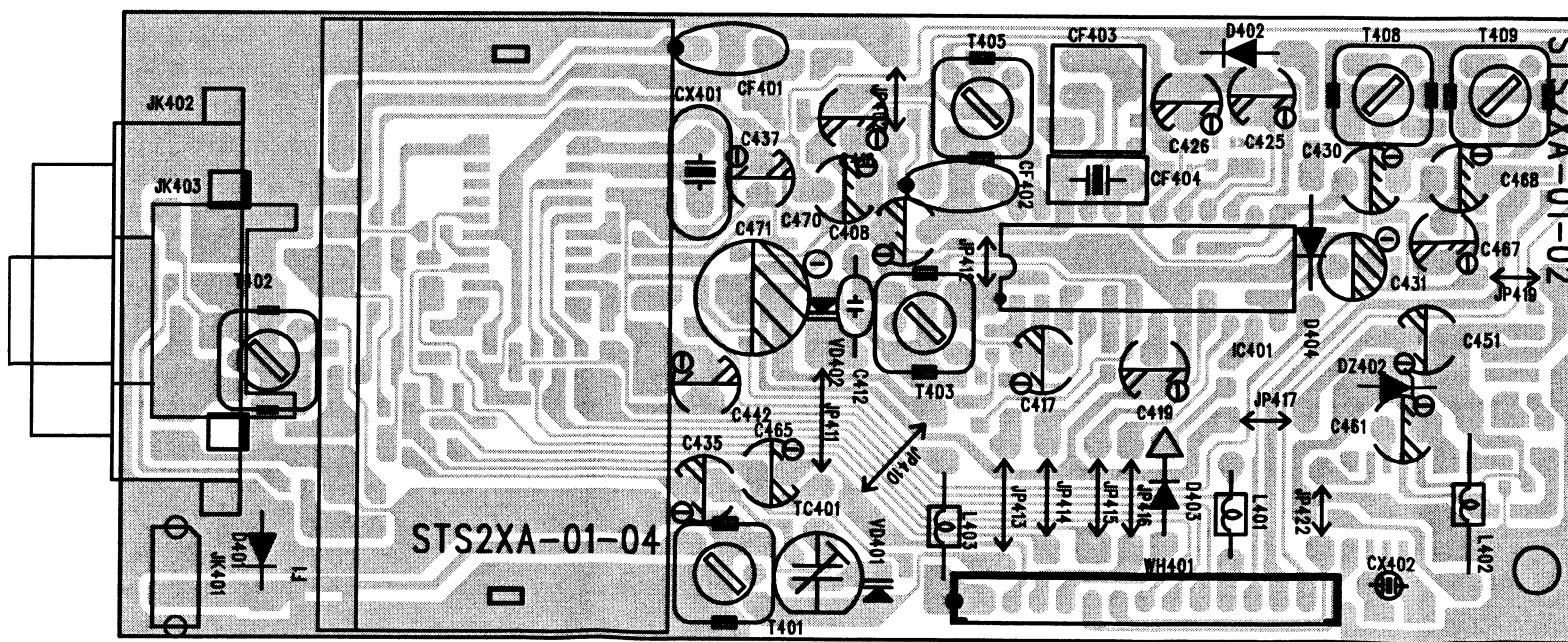
NOTES:

PCB Part No.: 033-00STW1-600 of this model are assembled and aligned in **FULL SET** and are supplied in **FULL SET** for serving.

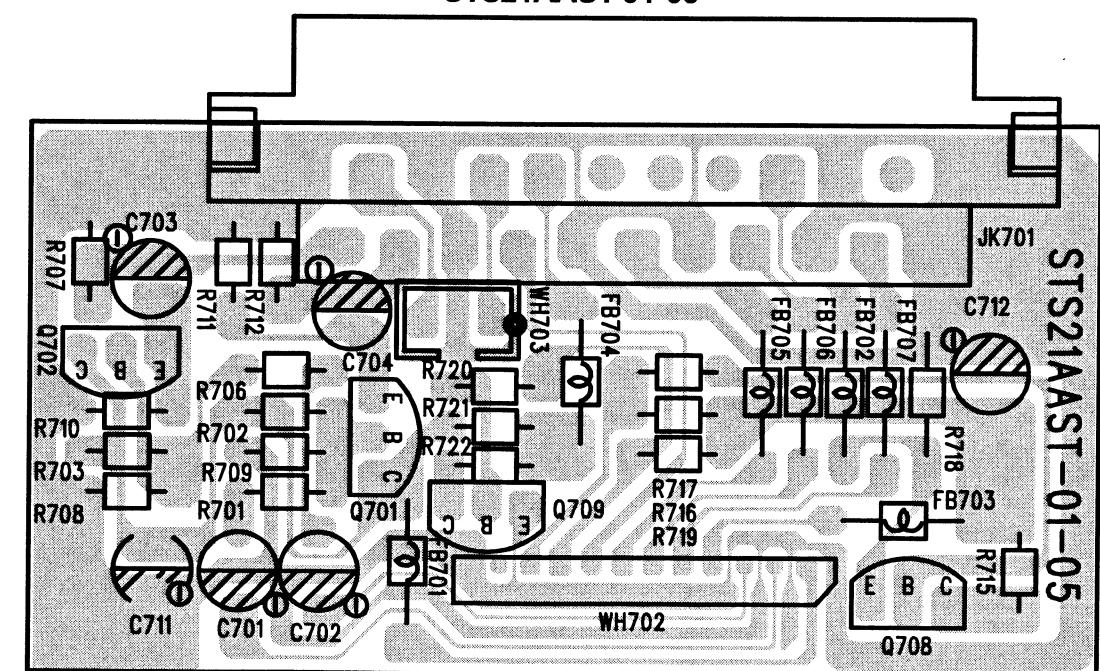
DISPLAY & KEY PCB STS61AAST-01-02

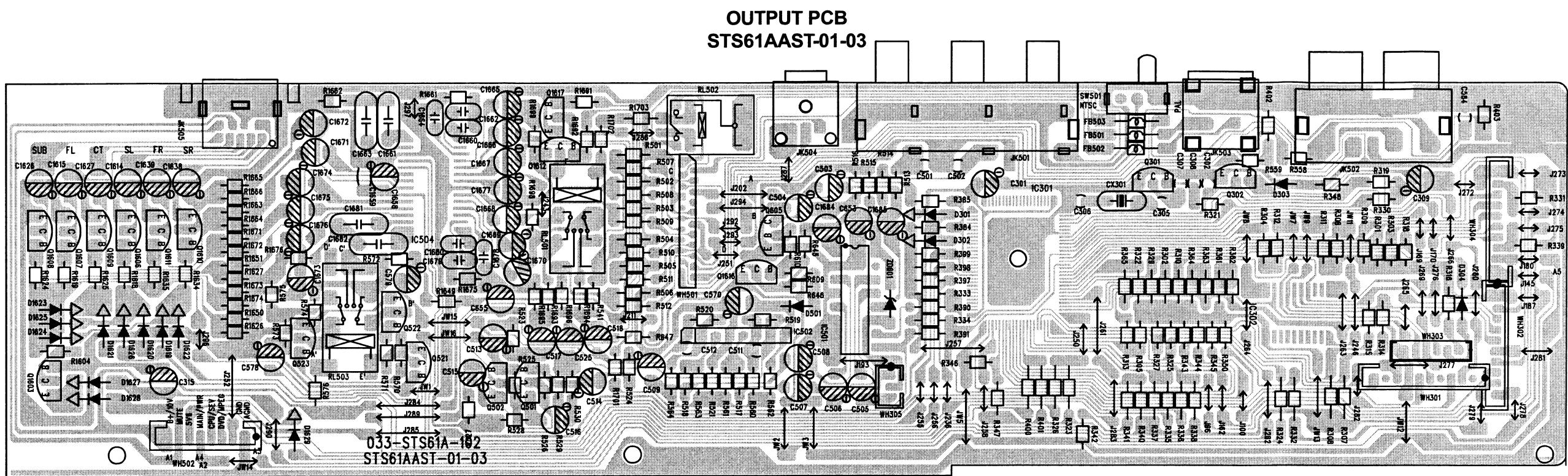


**TUNER PCB
STS21AAST-01-04**

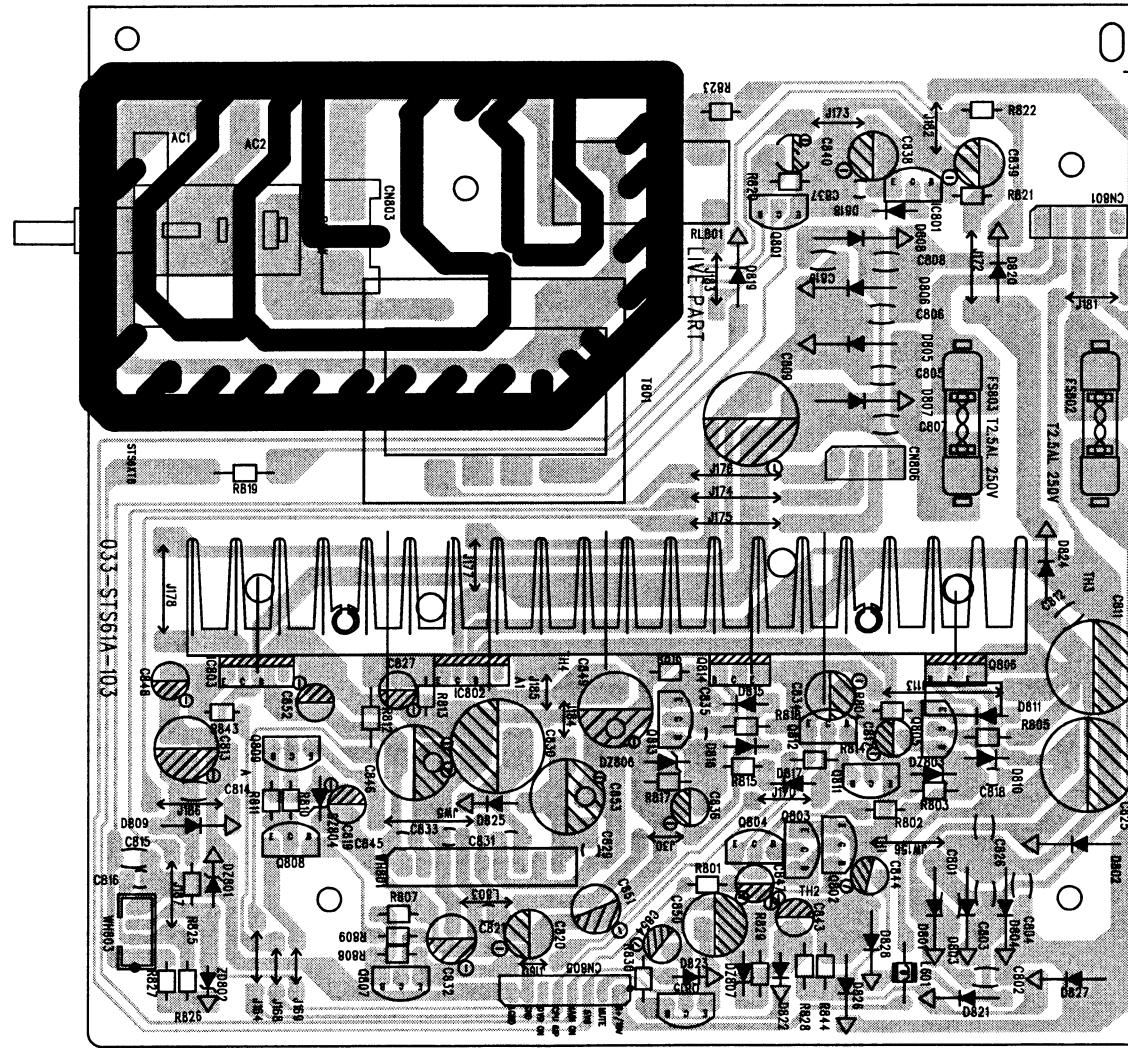


**SCART PCB
STS21AAST-01-05**

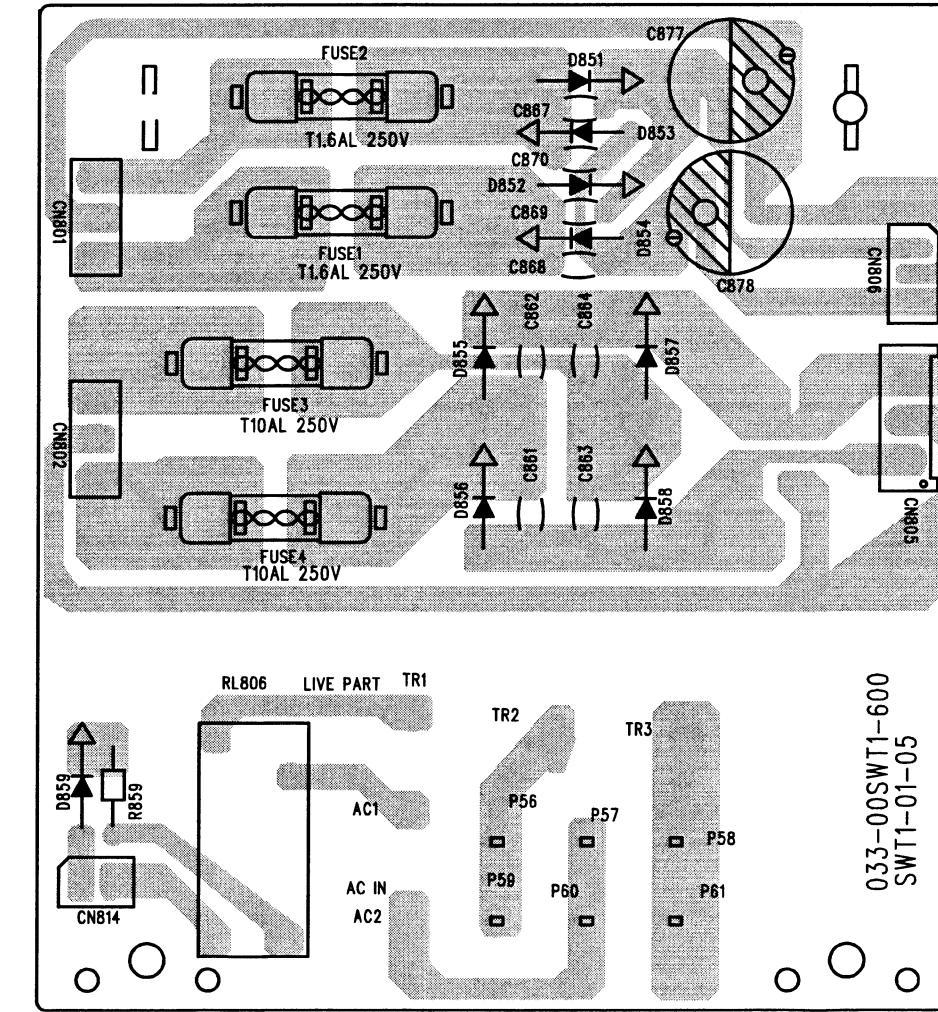




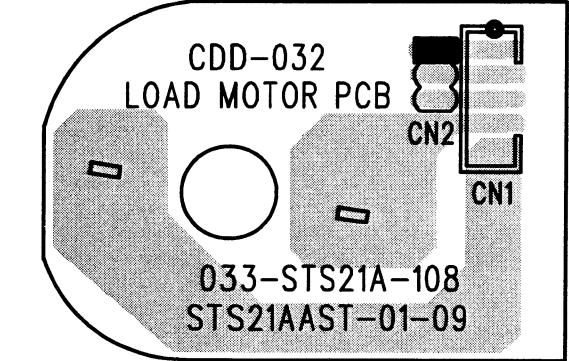
**RECTIFIER PCB
STS61AAST-01-04**



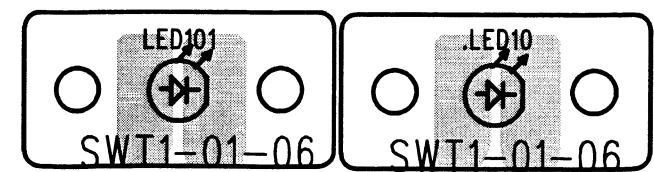
SUB-WOOFER RECTIFIER PCI SWT1-01-05



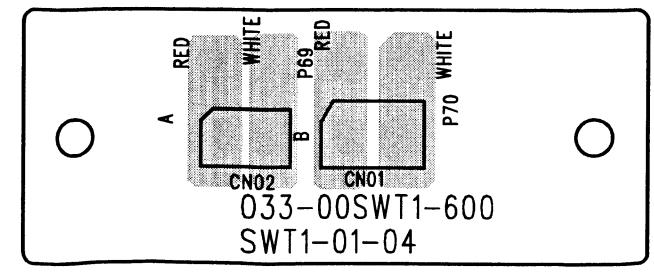
**LOAD MOTOR PCB
STS21AAST-01-09**



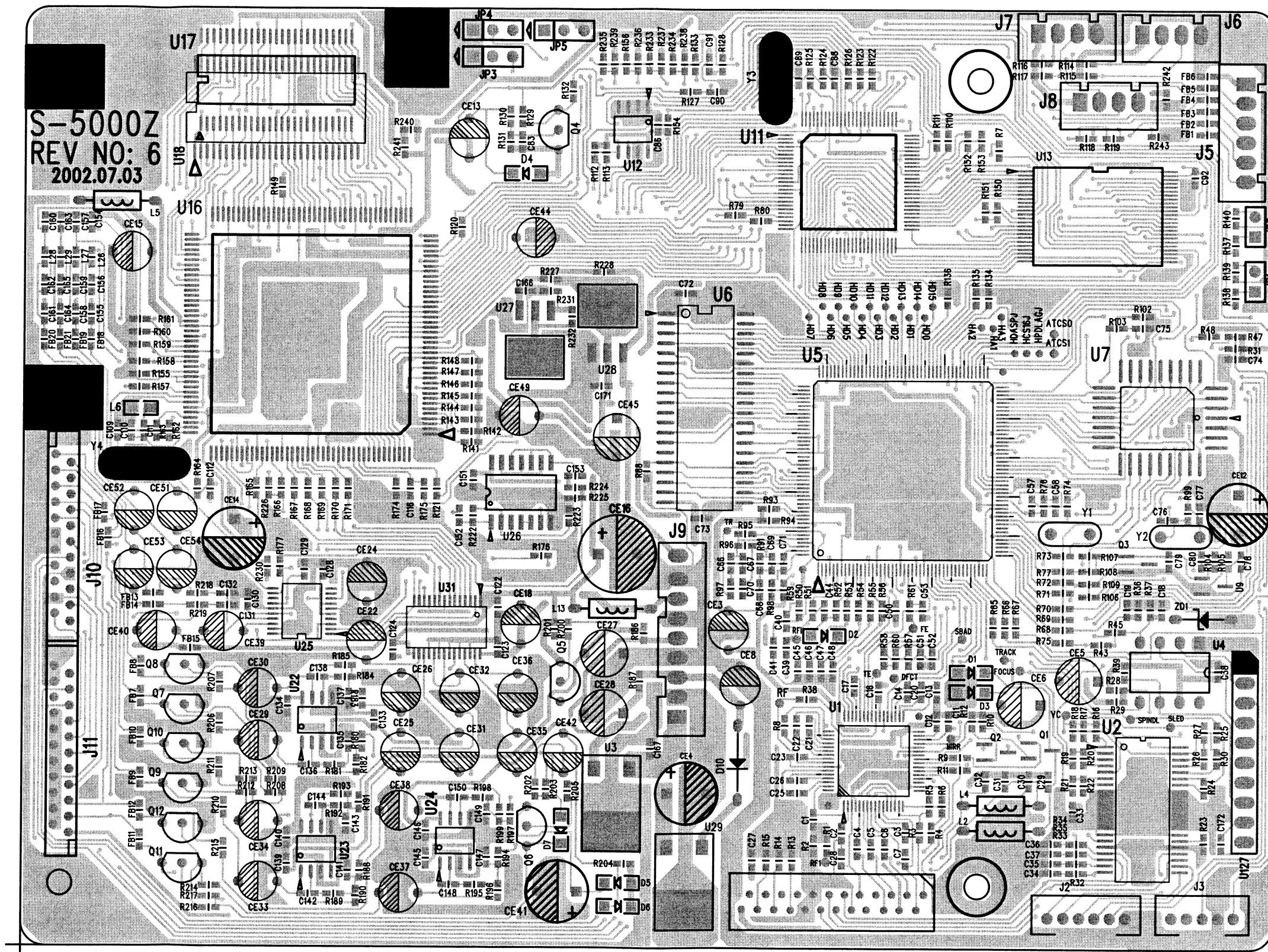
**LED PCB
SWT1-01-06**



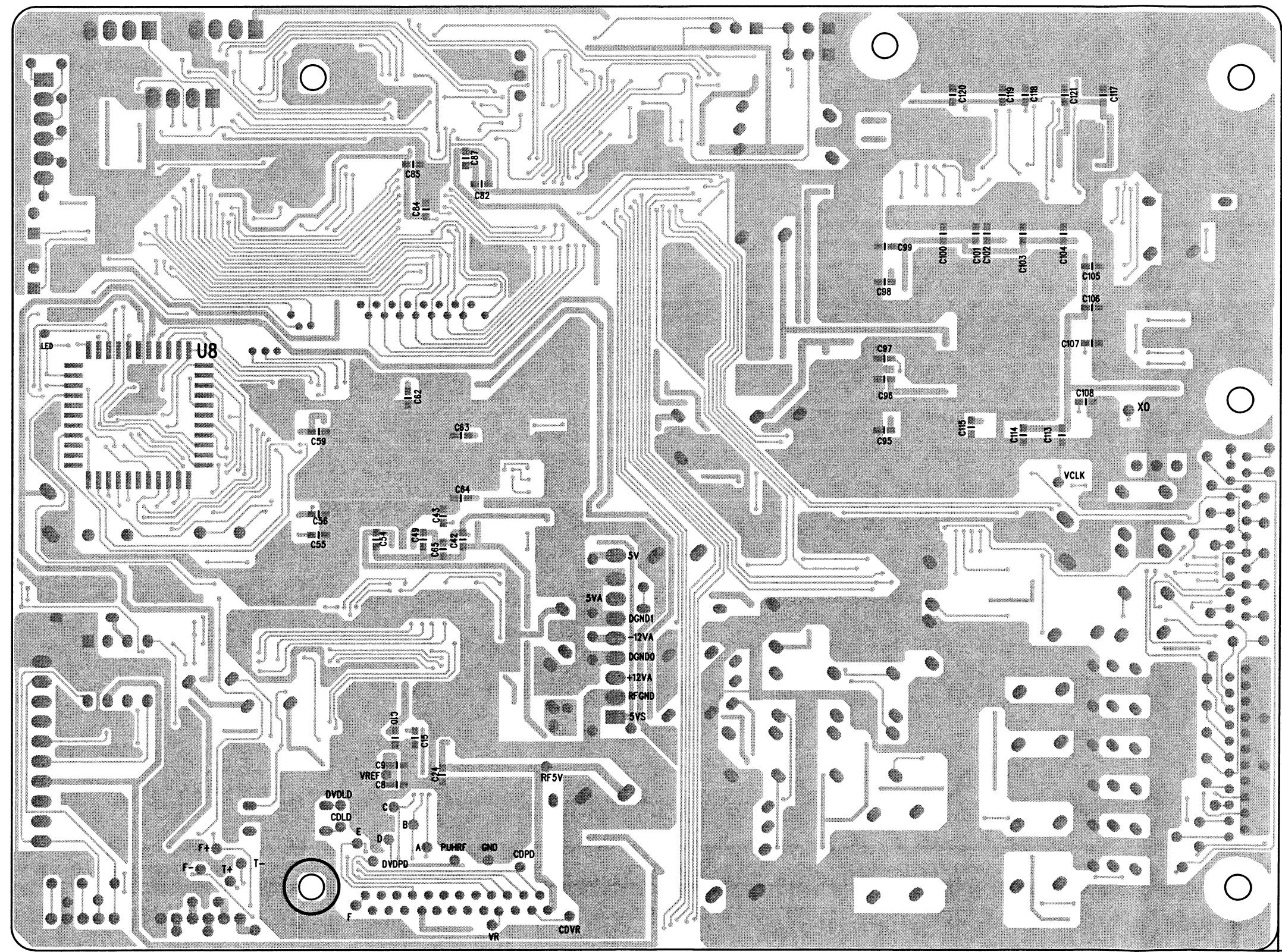
CONNECTION PCB SWT1-01-04



MPEG+SERVO PCB
STS21AAST-01-02

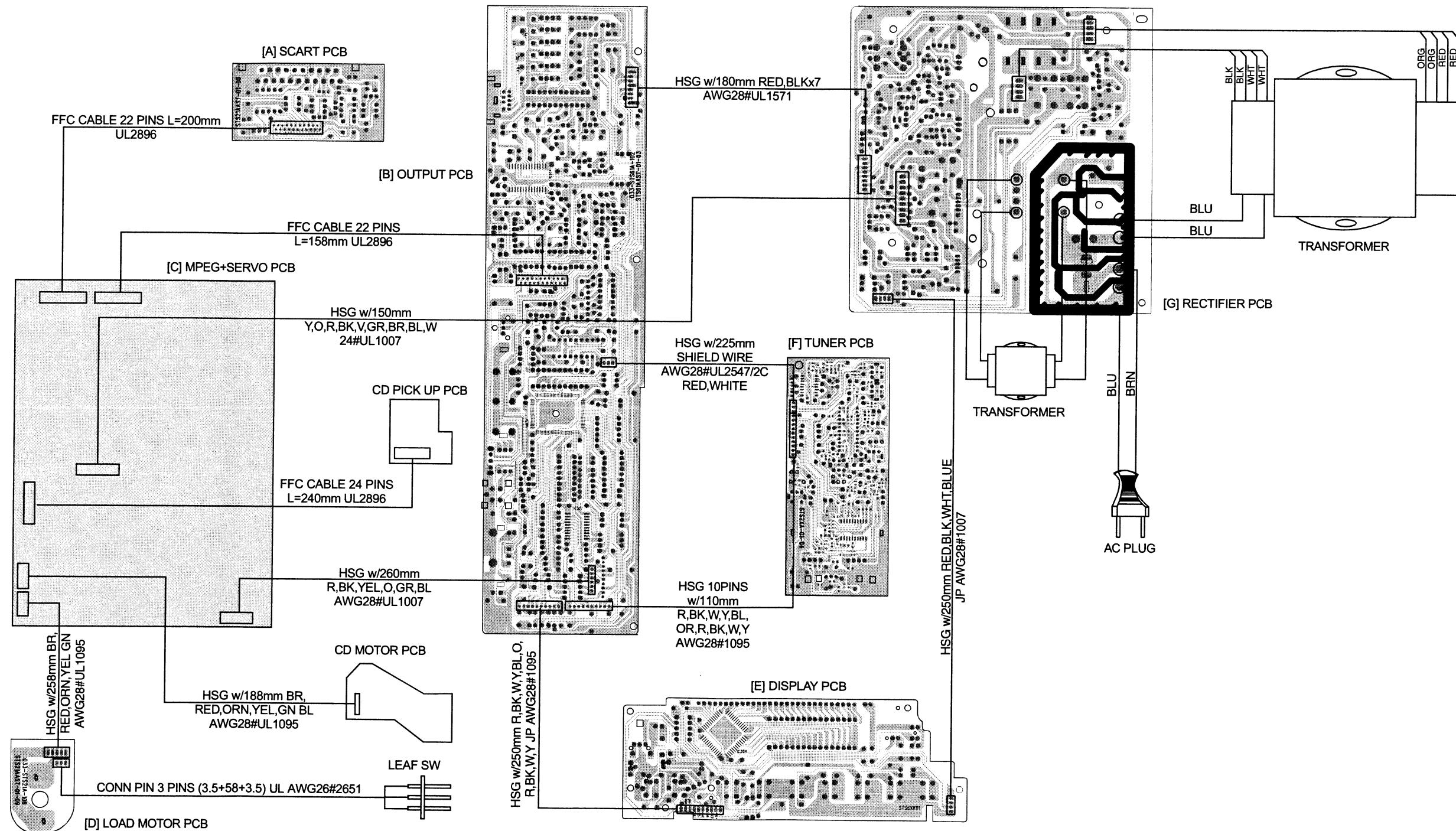


MPEG+SERVO PCB
STS21AAST-01-02

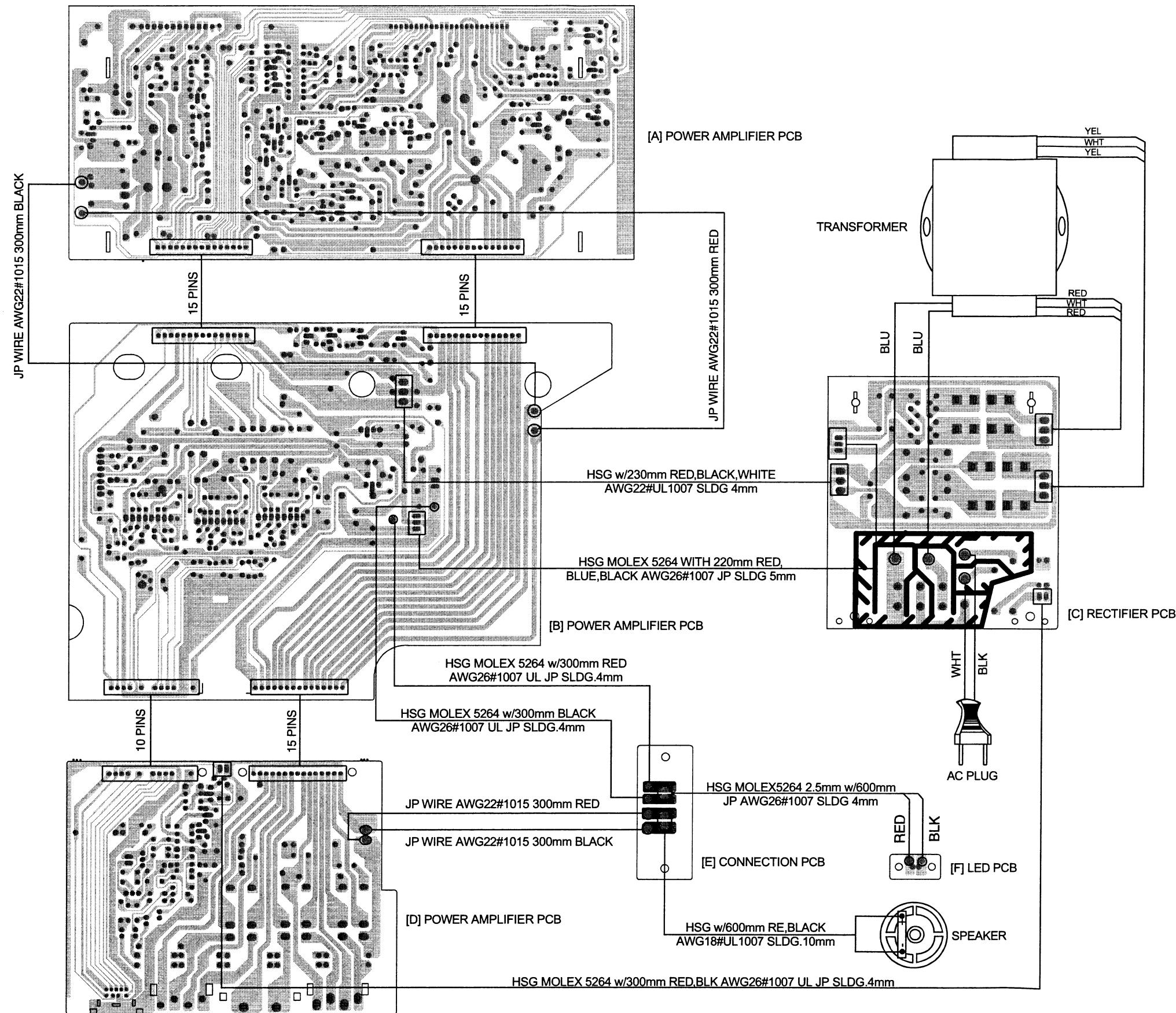


WIRING DIAGRAMS

MAIN UNIT

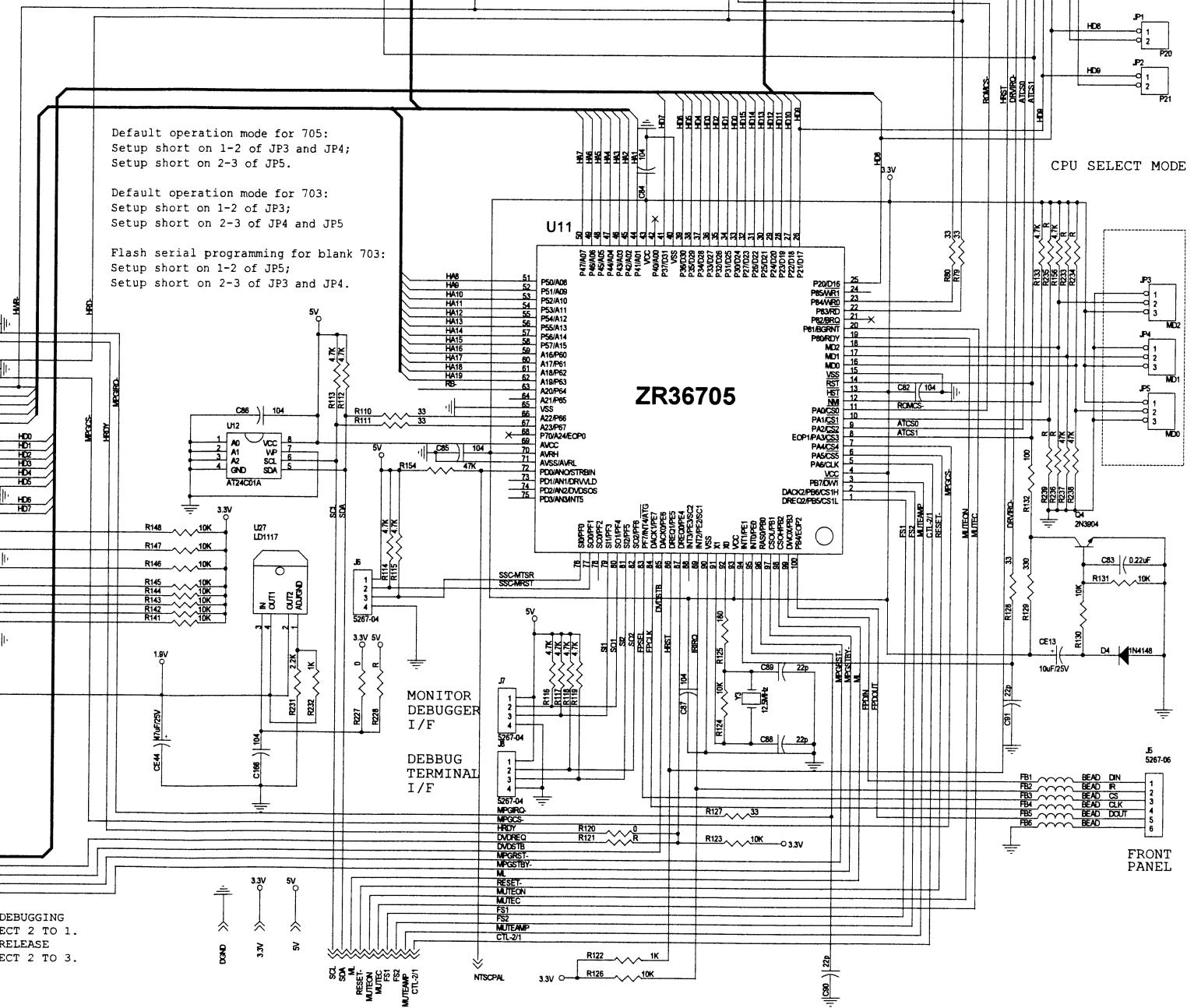
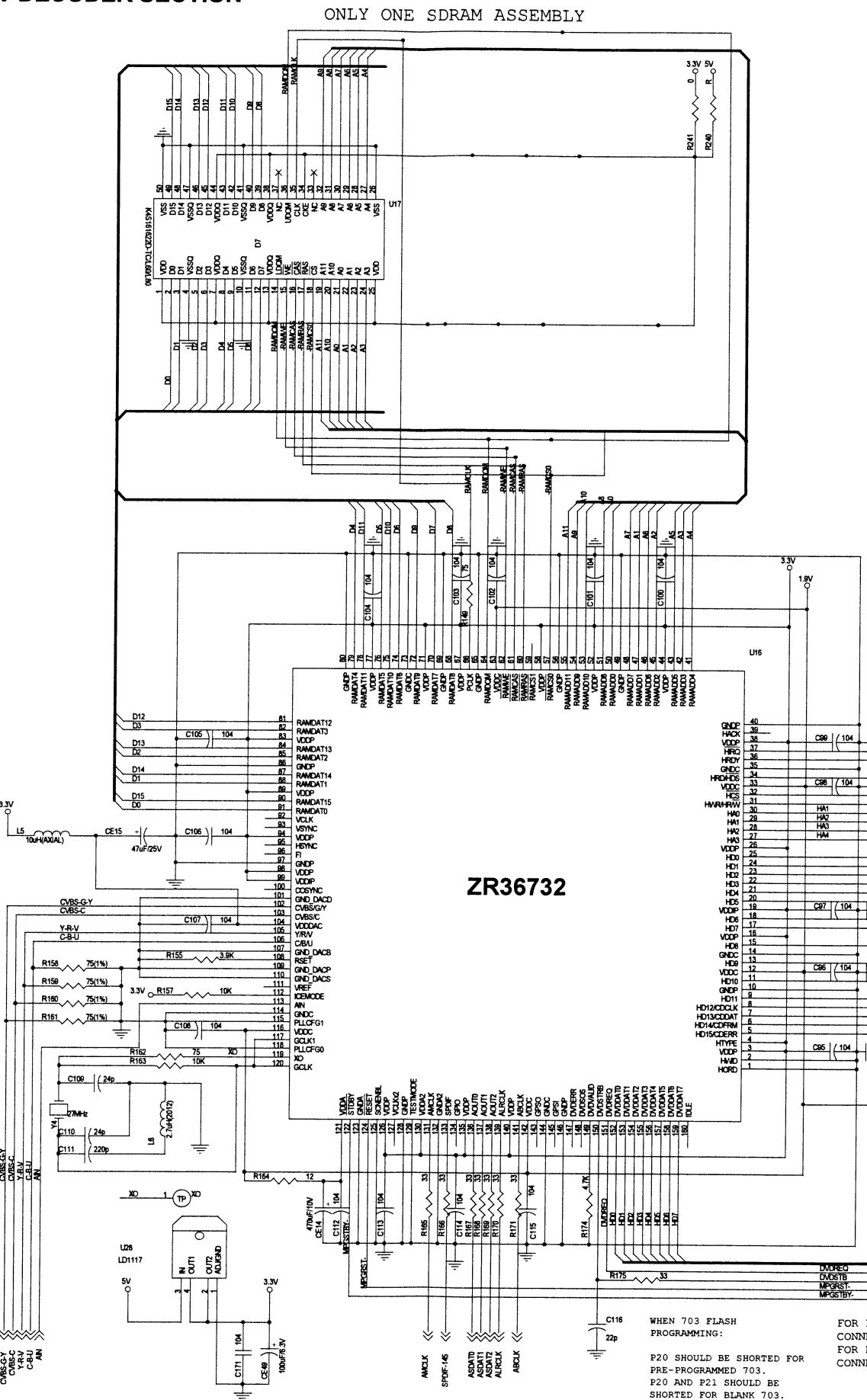


SUB-WOOFER SECTION



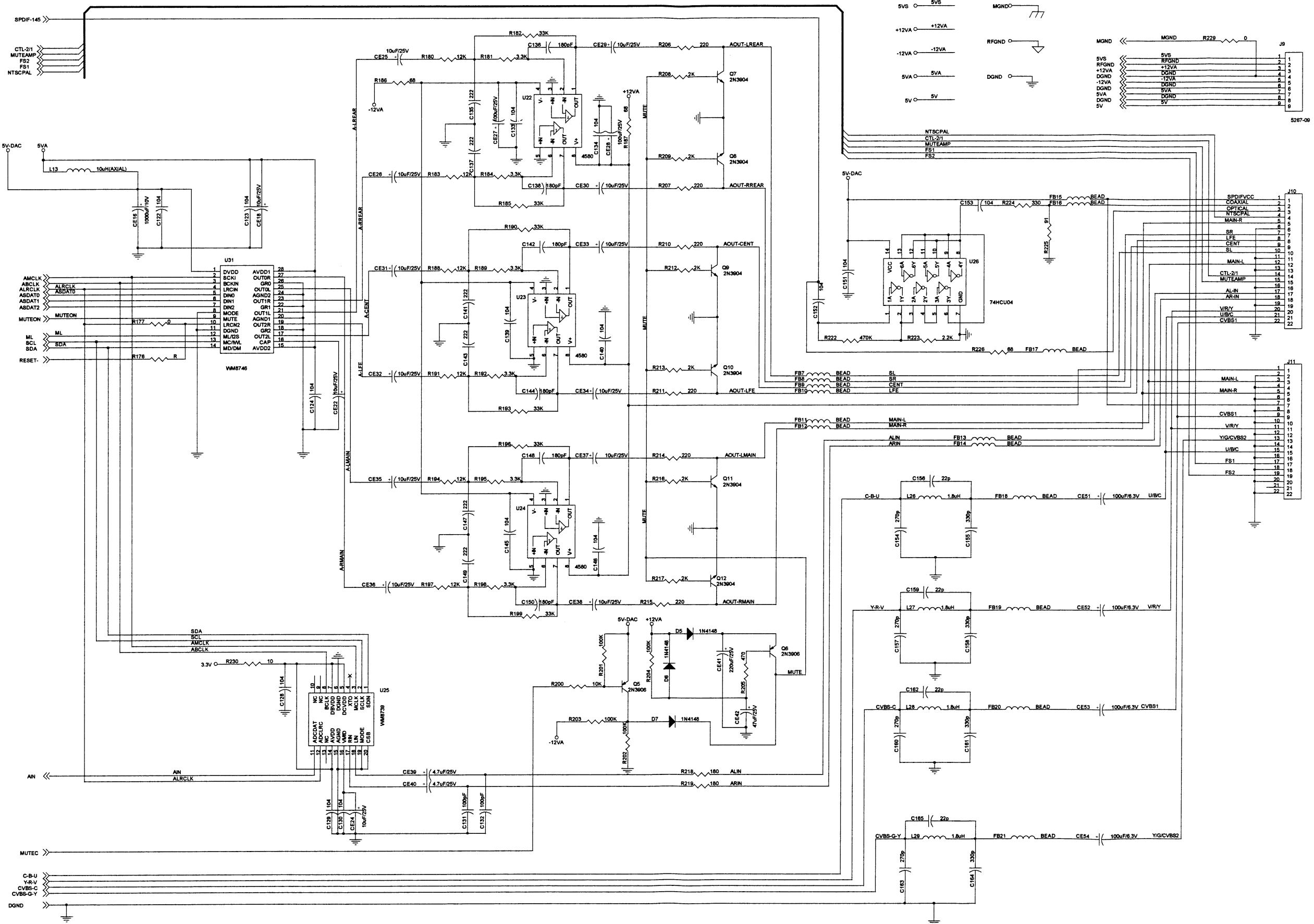
A/V DECODER SECTION

SCHEMATIC DIAGRAMS



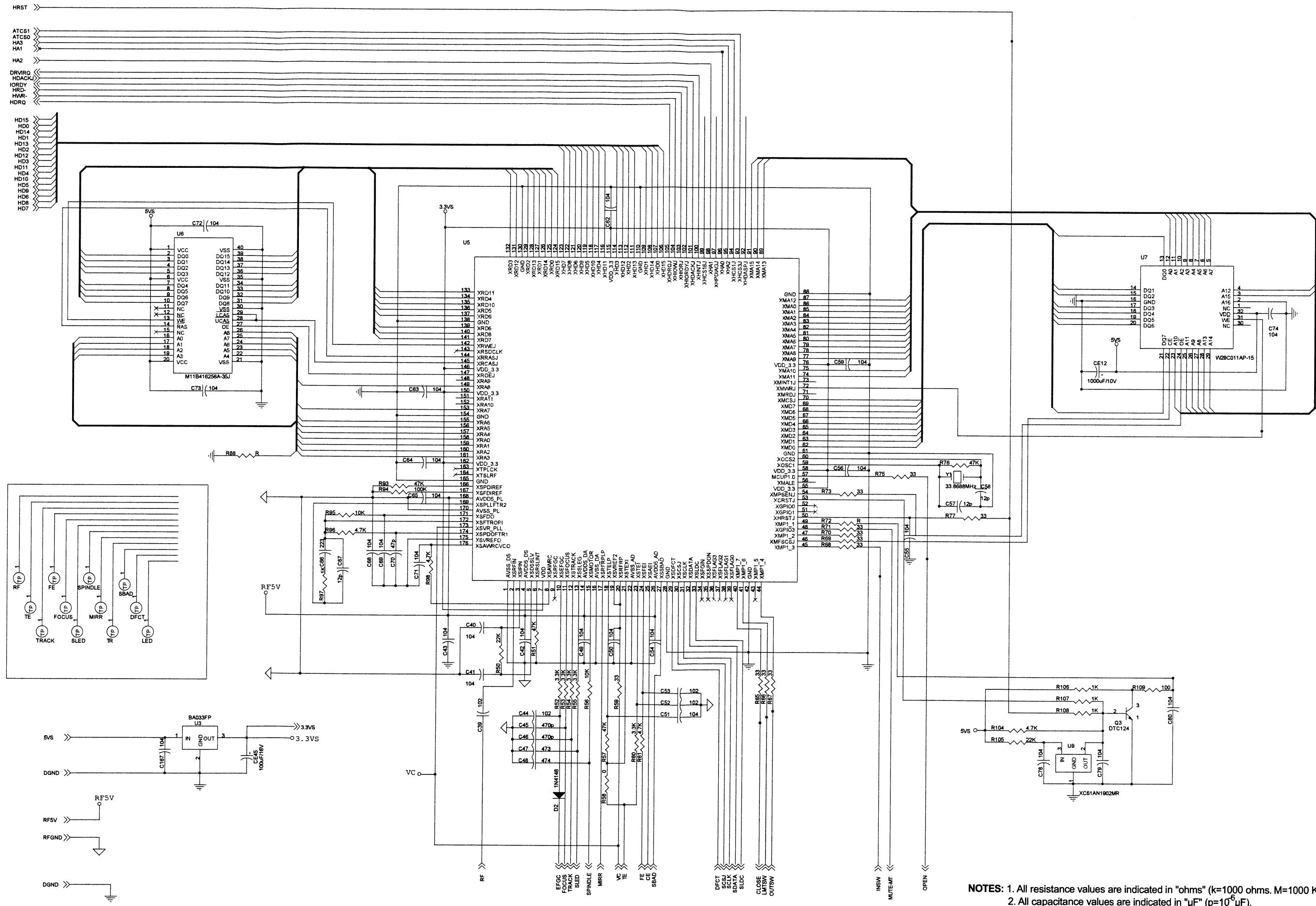
NOTES: 1. All resistance values are indicated in "ohms" ($k=1000$ ohms. $M=1000$ Kohms).
2. All capacitance values are indicated in " μF " ($p=10^6 \mu F$).

A/V OUTPUT SECTION

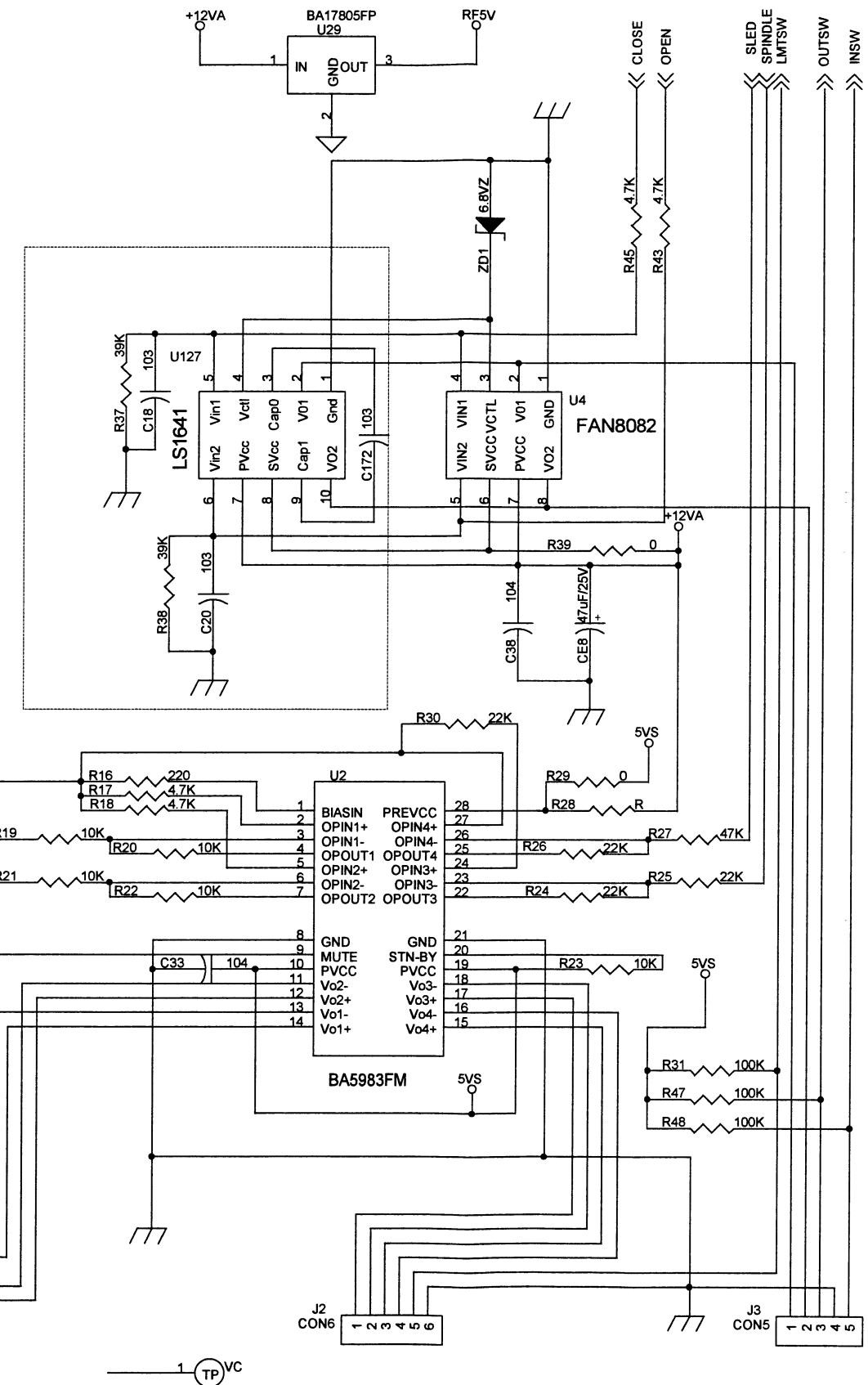
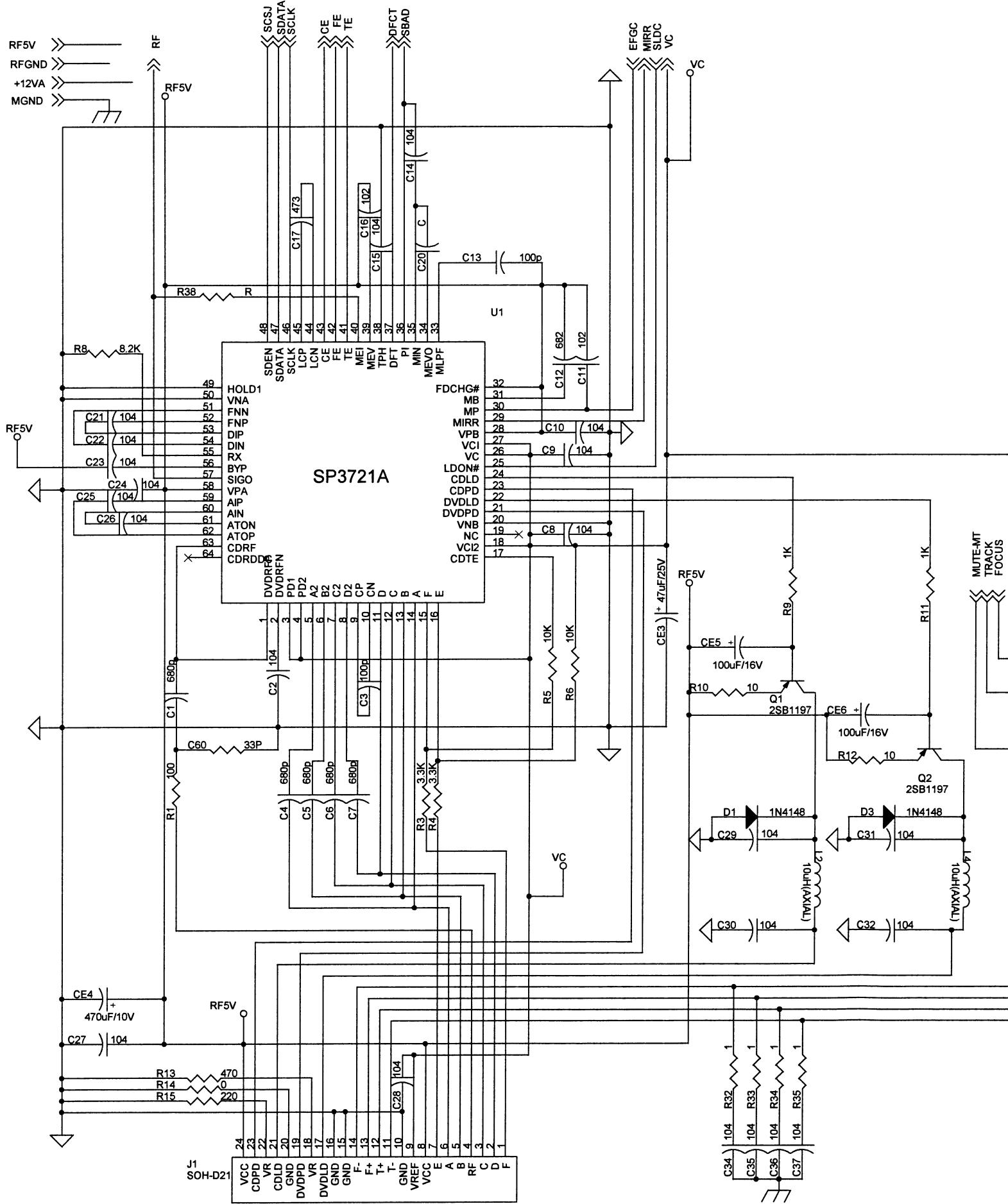


NOTES: 1. All resistance values are indicated in "ohms" ($k=1000$ ohms. $M=1000$ Kohms).
2. All capacitance values are indicated in " μF " ($p=10^6 \mu F$).

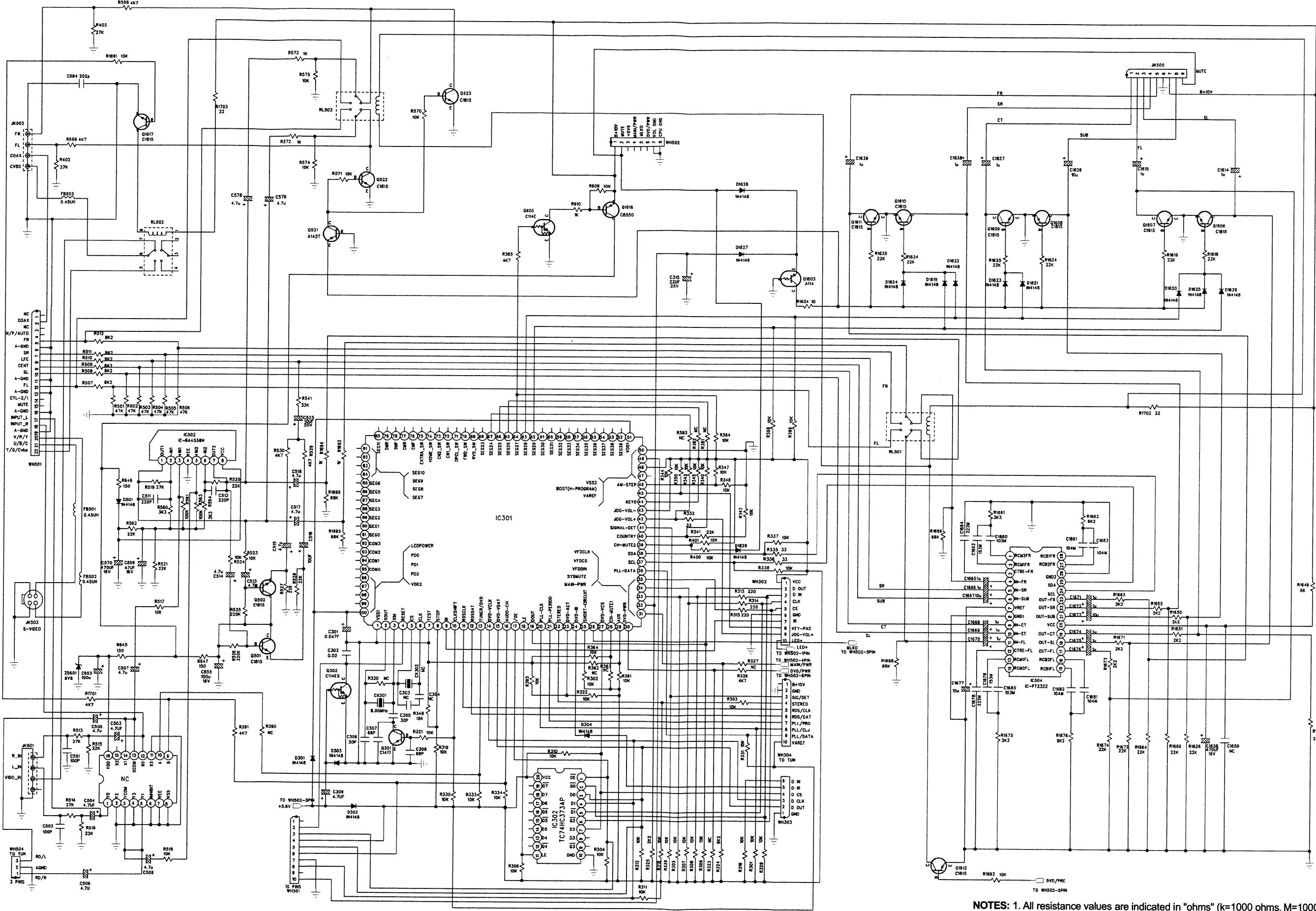
CHANNEL DECODER & U-COM SECTION



PREAMP & MOTOR DRIVER SECTION

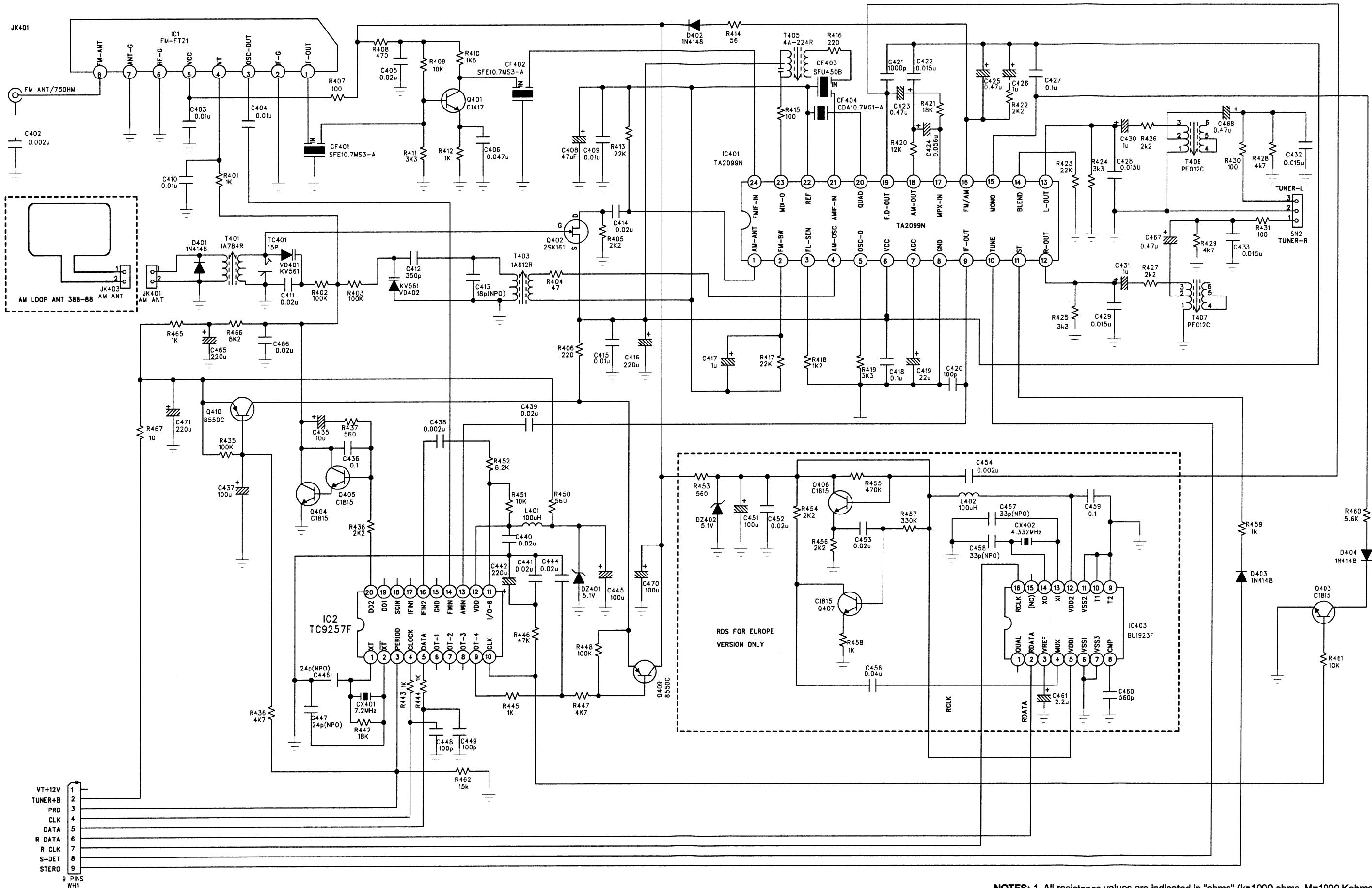


CPU SECTION



NOTES: 1. All resistance values are indicated in "ohms" ($k=1000$ ohms. $M=1000$ Kohms).
2. All capacitance values are indicated in " μF " ($p=10^6 \mu F$).

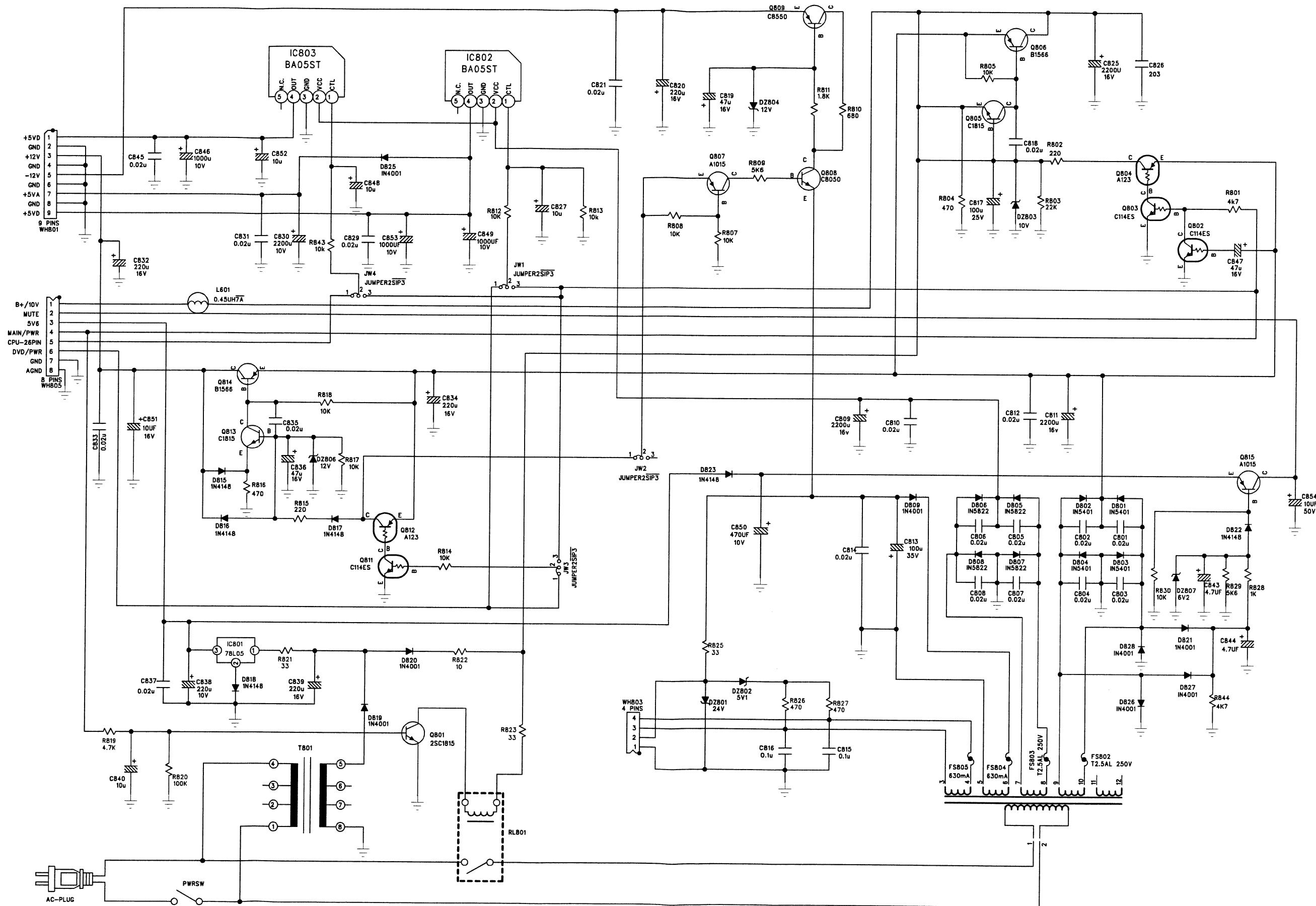
TUNER SECTION



| | |
|---|---------|
| 1 | VT+12V |
| 2 | TUNER+B |
| 3 | PRD |
| 4 | CLK |
| 5 | DATA |
| 6 | R DATA |
| 7 | R CLK |
| 8 | S-DET |
| 9 | STEREO |

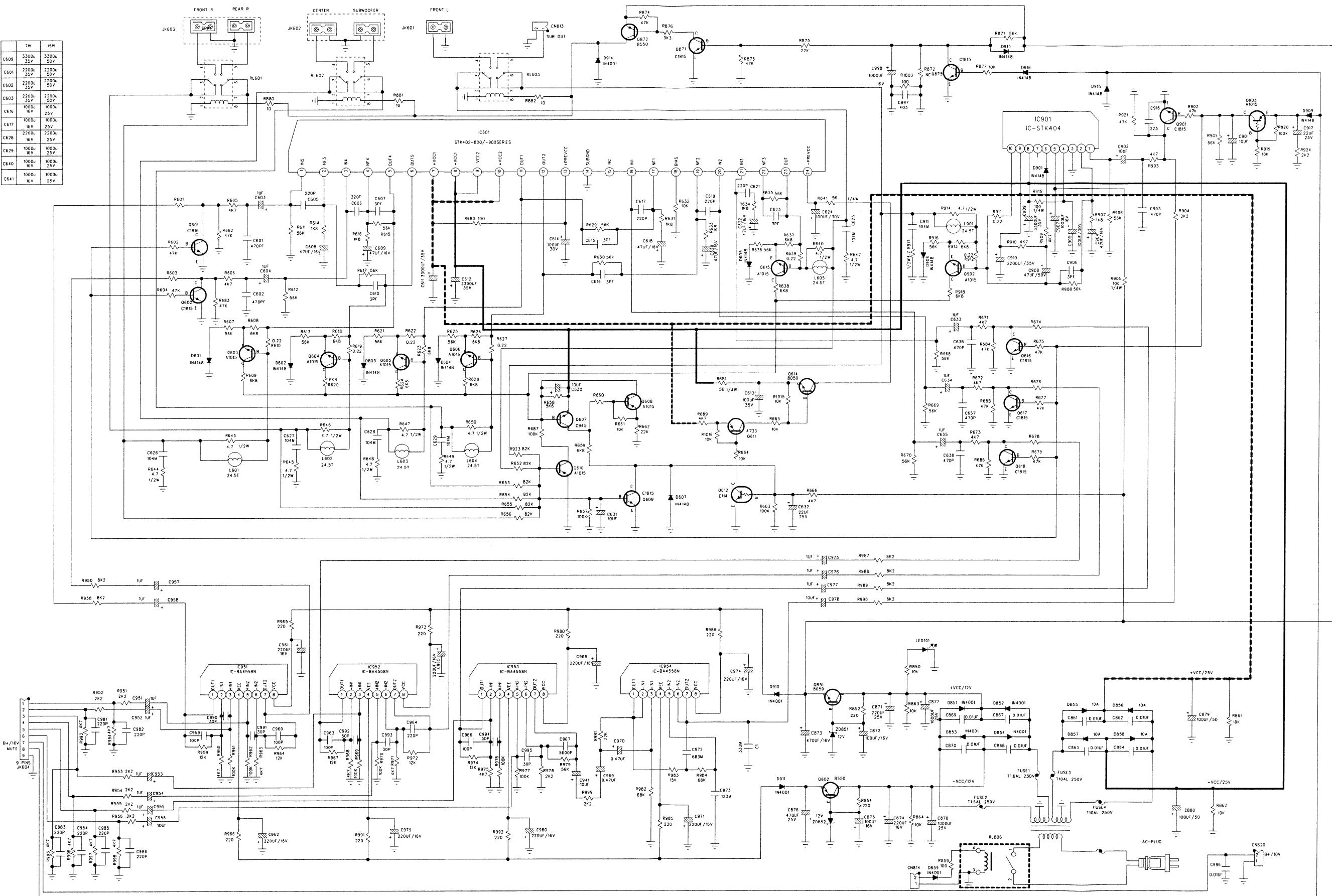
9 PINS WH1

POWER SUPPLY SECTION



NOTES: 1. All resistance values are indicated in "ohms" ($k=1000$ ohms. $M=1000$ Kohms).
2. All capacitance values are indicated in " μF " ($p=10^6 \mu F$).

POWER AMPLIFIER SECTION (FOR SUB-WOOFER)

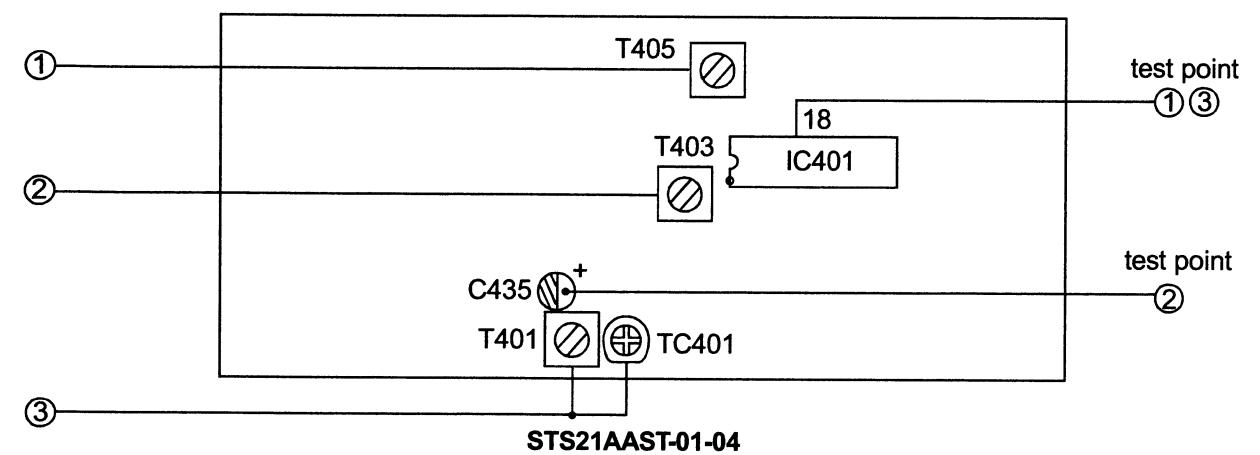


NOTES:

1. All resistance values are indicated in "ohms" ($k=1000$ ohms, $M=1000$ Kohms).
2. All capacitance values are indicated in " μ F" ($p=10^{-6}$ μ F).

ALIGNMENT SET-UP PROCEDURES

TUNER SECTION



1. AM IF Adjustment

Test point: IC401 (TA2099N)

Adjustment location: T405

T405 —————— 450±3kHz

3. MW Tracking Adjustment

Test point: IC402 (TA2099N) 18 PIN

Adjustment location: T401, TC401

T401 —————— 603kHz waveform max.

TC401 —————— 1404kHz waveform max.

2. MW Frequency Range Adjustment

Test point: C435 \oplus

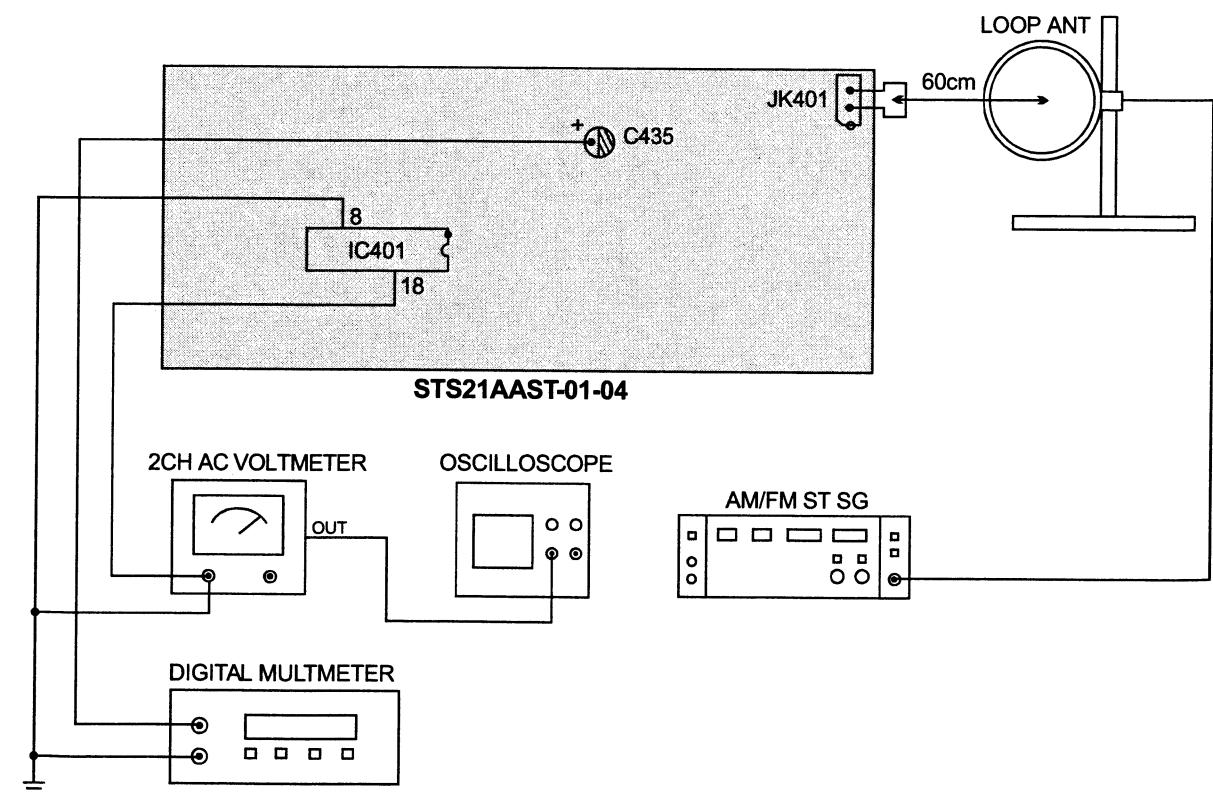
Adjustment location: T403

Set the tuner frequency to be 531kHz.

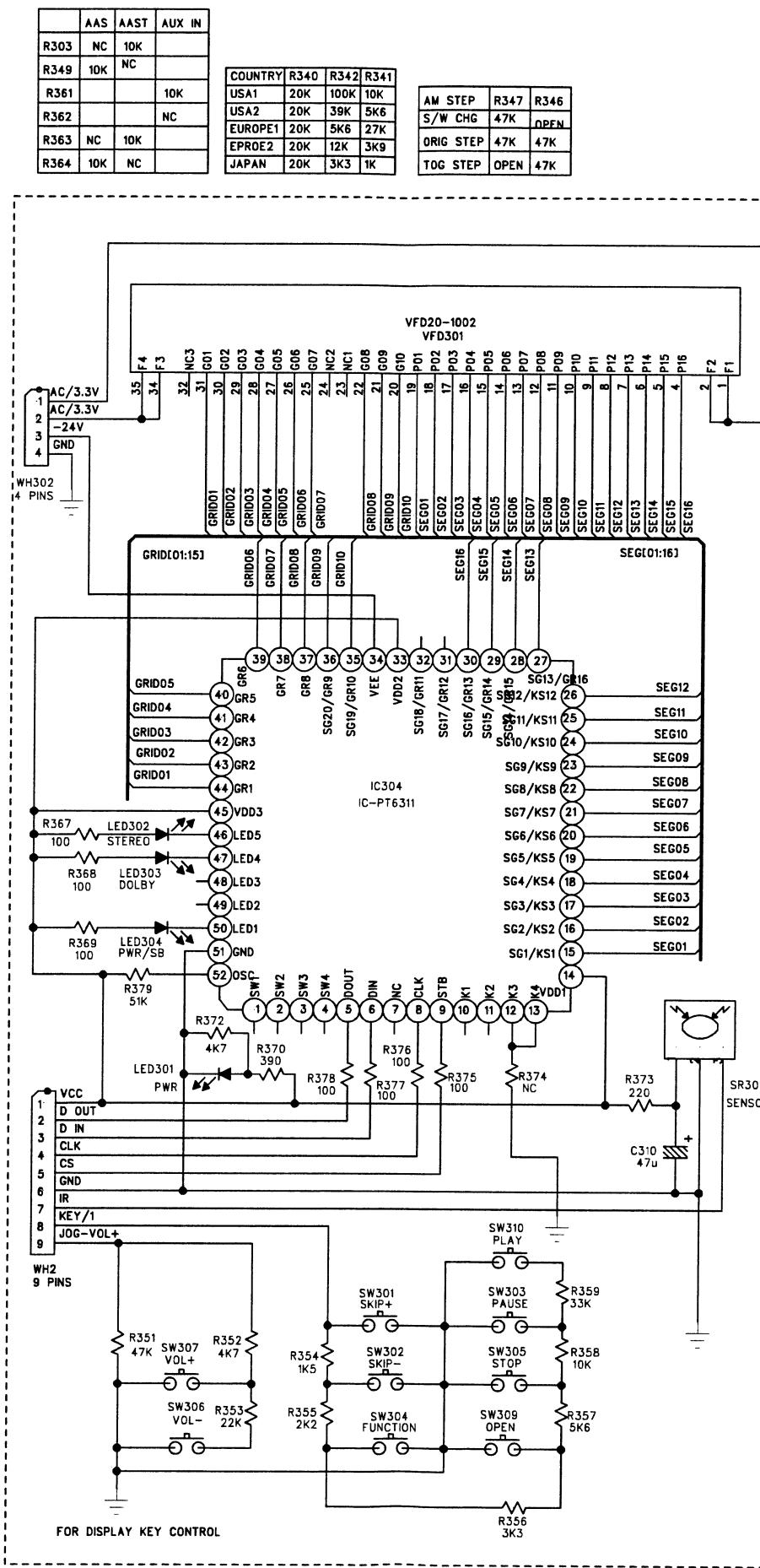
Adjust T403 so that the test point voltage is $1.7 \pm 0.05V$.

EQUIPMENT CONNECTION DIAGRAM

MW SECTION



CONTROL SECTION



VOLTAGE CHART

CPU & DISPLAY CONTROL SECTION

TEST CONDITION: DVD PLAY

IC301 (TMP87EP26F)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------|------|------|------|------|------|------|------|------|------|
| DVD PLAY | 0 | 2.43 | 2.15 | 4.75 | 0 | 0.24 | 0 | 4.01 | 4.61 | 0 |
| PIN'S NUMBER | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| DVD PLAY | 0.06 | 0.06 | 0.03 | 3.30 | 0.03 | 4.88 | 0.04 | 4.92 | 4.88 | 4.92 |
| PIN'S NUMBER | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| DVD PLAY | 4.92 | 4.88 | 0 | 4.92 | 4.88 | 0 | 3.30 | 4.92 | 0.04 | 4.89 |
| PIN'S NUMBER | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| DVD PLAY | 4.88 | 0.04 | 0.03 | 4.88 | 4.84 | 0.04 | 4.88 | 4.88 | 0 | 2.81 |
| PIN'S NUMBER | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| DVD PLAY | 4.88 | 4.02 | 4.88 | 4.88 | 0 | 2.44 | 0.16 | 4.87 | 0 | 0 |
| PIN'S NUMBER | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| DVD PLAY | 4.92 | / | / | / | / | / | / | / | / | / |
| PIN'S NUMBER | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| DVD PLAY | / | / | / | / | / | / | / | / | / | / |
| PIN'S NUMBER | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| DVD PLAY | / | / | / | / | / | / | / | / | / | / |
| PIN'S NUMBER | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| DVD PLAY | / | / | / | / | / | / | / | / | / | / |
| PIN'S NUMBER | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| DVD PLAY | / | / | / | / | / | / | / | / | / | 4.92 |

IC302 (TC74HC373AP)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------|------|------|------|------|------|------|------|----|------|
| DVD PLAY | 0.02 | 0.01 | 0.02 | 3.29 | 4.98 | 4.97 | 3.29 | 0.15 | 0 | 0 |
| PIN'S NUMBER | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| DVD PLAY | 4.29 | 0 | 0.15 | 0.15 | 0 | 0 | 0.15 | 0 | 0 | 4.99 |

| TRANSISTOR | Q301(2SC1417) | | | Q302(DTC114ES) | | |
|------------|---------------|------|---|----------------|------|---|
| | E | C | B | E | C | B |
| DVD PLAY | 0 | 0.24 | 0 | 0 | 4.21 | 0 |

IC304 (PT6311)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------|------|------|--------|------|------|------|------|------|------|
| DVD PLAY | 2.18 | 2.09 | 1.95 | 1.94 | 4.33 | 4.99 | 0 | 4.99 | 4.99 | 2.01 |
| PIN'S NUMBER | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| DVD PLAY | 1.95 | 0 | 0 | 4.99 | / | / | / | / | / | / |
| PIN'S NUMBER | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| DVD PLAY | / | / | / | / | / | / | / | / | / | / |
| PIN'S NUMBER | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| DVD PLAY | / | / | 4.99 | -25.10 | / | / | / | / | / | / |
| PIN'S NUMBER | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| DVD PLAY | / | / | / | / | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 4.80 |
| PIN'S NUMBER | 51 | 52 | | | | | | | | |
| DVD PLAY | 0 | 2.69 | | | | | | | | |

POWER AMP. SECTION

TEST CONDITION: DVD PLAY

IC502 (BA4558N)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--------------|------|------|------|---|------|------|------|------|
| DVD PLAY | 1.07 | 0.95 | 0.91 | 0 | 0.91 | 0.95 | 1.01 | 1.64 |

VOLTAGE CHART - CONTINUED

IC504 (PT2322-S)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------|------|------|------|------|------|------|------|------|------|
| DVD PLAY | 4.20 | 4.22 | 4.20 | 4.19 | 4.19 | 4.20 | 4.21 | 0 | 4.19 | 4.19 |
| PIN'S NUMBER | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| DVD PLAY | 4.20 | 4.21 | 4.22 | 4.21 | 4.22 | 4.22 | 4.22 | 4.22 | 4.22 | 4.46 |
| PIN'S NUMBER | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | | |
| DVD PLAY | 4.22 | 4.22 | 4.23 | 4.32 | 4.32 | 0 | 4.21 | 4.22 | | |

IC803 (BA05ST)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 |
|--------------|------|------|---|------|---|
| DVD PLAY | 4.20 | 7.86 | 0 | 5.00 | 0 |

IC802 (BA05ST)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 |
|--------------|------|------|---|------|---|
| DVD PLAY | 2.79 | 7.80 | 0 | 5.00 | 0 |

IC801 (LM78L05ACZ)

| PIN'S NUMBER | 1 | 2 | 3 |
|--------------|------|------|-------|
| DVD PLAY | 5.68 | 0.60 | 11.48 |

| TRANSISTOR | Q802(C1145ES) | | | Q803(C114ES) | | | Q804(A114) | | |
|------------|---------------|-------|-------|--------------|-------|-------|--------------|-------|-------|
| | E | C | B | E | C | B | E | C | B |
| DVD PLAY | 0 | 2.08 | 0.13 | 0 | 0 | 2.08 | 14.18 | 13.80 | 0 |
| TRANSISTOR | Q805(C1815) | | | Q806(B1566) | | | Q807(A1015) | | |
| E | C | B | E | C | B | E | C | B | |
| DVD PLAY | 9.95 | 13.41 | 10.47 | 14.11 | 10.65 | 13.56 | 14.09 | 13.65 | 13.08 |
| TRANSISTOR | Q808(C8050) | | | Q809(C8550) | | | Q811(C114ES) | | |
| E | C | B | E | C | B | E | C | B | |
| DVD PLAY | 18.90 | 18.80 | 18.23 | 11.35 | 11.37 | 12.03 | 0 | 0 | 2.70 |
| TRANSISTOR | Q812(A123) | | | Q813(C1815) | | | Q814(B1566) | | |
| E | C | B | E | C | B | E | C | B | |
| DVD PLAY | 14.02 | 14.04 | 0 | 11.50 | 13.55 | 12.05 | 14.16 | 12.21 | 13.43 |
| TRANSISTOR | Q815(A1015) | | | E | C | B | | | |
| DVD PLAY | 5.61 | 0 | 5.65 | | | | | | |

U13 (SST39VF800A)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------|------|------|------|------|------|------|------|------|------|
| DVD PLAY | 0.70 | 0.50 | 0.60 | 0.70 | 0.60 | 2.80 | 0 | 2.82 | 0 | 0 |
| PIN'S NUMBER | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| DVD PLAY | 3.20 | 3.30 | 0 | 0 | 0 | 0.40 | 0.70 | 2.50 | 2.30 | 0.40 |
| PIN'S NUMBER | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| DVD PLAY | 0.65 | 1.00 | 1.00 | 1.92 | 1.45 | 0 | 0 | 1.26 | 1.28 | 1.44 |
| PIN'S NUMBER | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| DVD PLAY | 1.58 | 0.64 | 1.50 | 1.22 | 1.25 | 1.08 | 3.30 | 0 | 0.74 | 0.71 |
| PIN'S NUMBER | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | | |
| DVD PLAY | 0 | 1.04 | 0.81 | 2.04 | 1.70 | 0 | 3.30 | 0.19 | | |

VOLTAGE CHART - CONTINUED

U16 (ZR36732PQC)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------|------|------|------|------|------|------|------|------|------|
| DVD PLAY | 0 | 0.00 | 3.30 | 3.30 | 3.27 | 3.27 | 3.27 | 2.16 | 0 | |
| PIN'S NUMBER | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| DVD PLAY | 3.27 | 1.85 | 3.27 | 0 | 3.27 | 3.30 | 2.10 | 1.06 | 3.31 | 0.82 |
| PIN'S NUMBER | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| DVD PLAY | 1.63 | 1.40 | 1.39 | 1.23 | 1.49 | 3.30 | 1.15 | 1.21 | 1.78 | 1.54 |
| PIN'S NUMBER | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| DVD PLAY | 3.22 | 3.30 | 1.85 | 1.24 | 0 | 0.35 | 3.25 | 3.30 | 3.21 | 0 |
| PIN'S NUMBER | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| DVD PLAY | 0.49 | 0.54 | 0.53 | 3.30 | 0.44 | 0.45 | 0.35 | 0.49 | 0 | 0.37 |
| PIN'S NUMBER | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| DVD PLAY | 0.27 | 3.30 | 2.12 | 0.35 | 0.51 | 0 | 3.04 | 3.30 | 3.14 | 3.16 |
| PIN'S NUMBER | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| DVD PLAY | 3.23 | 3.19 | 1.85 | 0 | 0 | 1.75 | 3.30 | 1.71 | 0 | 1.35 |
| PIN'S NUMBER | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| DVD PLAY | 3.31 | 1.40 | 0 | 1.40 | 1.48 | 1.27 | 3.31 | 1.40 | 1.61 | 0 |
| PIN'S NUMBER | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| DVD PLAY | 1.63 | 1.53 | 3.29 | 0.52 | 1.71 | 0 | 2.30 | 1.71 | 3.29 | 0.64 |
| PIN'S NUMBER | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| DVD PLAY | 1.42 | 1.66 | 0.07 | 3.28 | 3.04 | 1.64 | 0 | 3.28 | 3.24 | 0.26 |
| PIN'S NUMBER | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 |
| DVD PLAY | 0.77 | 1.25 | 1.03 | 3.28 | 1.12 | 1.47 | 0 | 1.22 | 0 | 0 |
| PIN'S NUMBER | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 |
| DVD PLAY | 0 | 3.28 | 0.29 | 0 | 0 | 1.82 | 1.59 | 0 | 1.61 | 1.59 |
| PIN'S NUMBER | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 |
| DVD PLAY | 1.82 | 3.29 | 0 | 3.29 | 0 | 3.28 | 1.70 | 0 | 0 | 3.29 |
| PIN'S NUMBER | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 |
| DVD PLAY | 1.63 | 0 | 0 | 0 | 2.90 | 3.29 | 1.07 | 0 | 0 | 1.04 |
| PIN'S NUMBER | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 |
| DVD PLAY | 1.64 | 3.29 | 1.82 | 0 | 0 | 0.50 | 0 | 0.53 | 0.53 | 0 |
| PIN'S NUMBER | 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 |
| DVD PLAY | 2.57 | 0 | 0 | 2.20 | 1.96 | 1.65 | 2.33 | 0 | 1.65 | 0 |

U11 (ZR36705TQC)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------|------|------|------|------|------|------|------|------|------|
| DVD PLAY | 0 | 0 | 3.29 | 3.29 | 3.29 | 3.38 | 3.29 | 3.30 | 3.29 | 3.29 |
| PIN'S NUMBER | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| DVD PLAY | 1.45 | 3.29 | 3.29 | 3.29 | 0 | 0 | 0 | 0 | 3.29 | 3.29 |
| PIN'S NUMBER | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| DVD PLAY | 2.86 | 0.67 | 3.30 | 3.29 | 3.86 | 3.86 | 5.07 | 5.07 | 3.37 | 3.20 |
| PIN'S NUMBER | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| DVD PLAY | 3.15 | 3.43 | 3.32 | 4.67 | 2.35 | 3.43 | 1.85 | 1.93 | 3.16 | 0 |
| PIN'S NUMBER | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| DVD PLAY | 3.80 | 2.40 | 3.29 | 1.80 | 0.06 | 1.22 | 0.05 | 0 | 0 | 0 |
| PIN'S NUMBER | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| DVD PLAY | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.60 | 2.53 | |
| PIN'S NUMBER | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| DVD PLAY | 3.29 | 3.29 | 3.29 | 3.29 | 0 | 5.04 | 0.04 | 3.29 | 5.05 | 3.29 |
| PIN'S NUMBER | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| DVD PLAY | 0 | 3.29 | 3.11 | 3.11 | 2.03 | 5.05 | 5.05 | 3.29 | 5.05 | 5.05 |
| PIN'S NUMBER | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| DVD PLAY | 5.05 | 3.30 | 3.29 | 3.29 | 3.27 | 0.53 | 2.91 | 3.63 | 0.00 | 1.43 |
| PIN'S NUMBER | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| DVD PLAY | 1.50 | 3.29 | 0.15 | 3.29 | 3.29 | 3.29 | 3.29 | 3.29 | 4.32 | 0.02 |

VOLTAGE CHART - CONTINUED

U17 (K4S161622D)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------|------|------|------|------|------|------|------|------|------|
| DVD PLAY | 3.30 | 1.45 | 0.70 | 0 | 0.77 | 0.75 | 3.30 | 2.10 | 0.82 | 0 |
| PIN'S NUMBER | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| DVD PLAY | 0.78 | 0.90 | 3.30 | 0 | 3.19 | 3.23 | 3.16 | 3.08 | 0.52 | 1.74 |
| PIN'S NUMBER | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| DVD PLAY | 0 | 0 | 0.45 | 0 | 3.30 | 0 | 0.55 | 0.55 | 0.53 | 0.55 |
| PIN'S NUMBER | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| DVD PLAY | 0.26 | 0.30 | 0 | 3.30 | 1.73 | 0 | 0 | 3.30 | 1.45 | 1.23 |
| PIN'S NUMBER | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| DVD PLAY | 0 | 1.20 | 1.15 | 3.30 | 1.65 | 1.16 | 0 | 1.16 | 0.86 | 0 |

U25 (WM8739EDS)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------|------|------|------|------|------|------|------|------|------|
| DVD PLAY | 3.76 | 0 | 1.68 | 0.25 | 3.15 | 0 | 3.15 | 1.65 | 0.37 | 0.69 |
| PIN'S NUMBER | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| DVD PLAY | 0.97 | 1.65 | 0 | 3.15 | 0 | 1.56 | 1.56 | 1.57 | 0 | 0 |

U31 (WM8746EDS)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------|------|------|------|------|------|------|----|------|------|
| DVD PLAY | 4.32 | 1.68 | 1.65 | 1.65 | 1.66 | 1.65 | 1.65 | 0 | 0 | 1.65 |
| PIN'S NUMBER | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| DVD PLAY | 0 | 3.30 | 0 | 3.75 | 4.35 | 2.17 | 2.18 | 0 | 2.18 | 0 |
| PIN'S NUMBER | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | | |
| DVD PLAY | 2.18 | 0 | 2.18 | 0 | 2.18 | 0 | 2.18 | 4 | | |

U22 (NJM4580E)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--------------|---|---|---|-------|---|---|---|-------|
| DVD PLAY | 0 | 0 | 0 | 10.43 | 0 | 0 | 0 | 11.23 |

U23 (NJM4580E)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--------------|---|---|---|-------|---|---|---|-------|
| DVD PLAY | 0 | 0 | 0 | 10.43 | 0 | 0 | 0 | 11.23 |

U26 (74HCU04AF)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------------|------|------|------|------|------|------|------|
| DVD PLAY | 2.03 | 2.10 | 2.10 | 2.16 | 2.16 | 2.15 | 0 |
| PIN'S NUMBER | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| DVD PLAY | 3.16 | 2.15 | 2.16 | 2.15 | 2.16 | 2.15 | 4.32 |

U7 (W29EE512P-70)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--------------|------|------|------|------|------|------|------|------|
| DVD PLAY | 0 | 0 | 1.65 | 1.88 | 2.10 | 2.09 | 1.59 | 1.75 |
| PIN'S NUMBER | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| DVD PLAY | 2.00 | 1.96 | 1.97 | 1.96 | 1.61 | 1.86 | 1.69 | 0 |
| PIN'S NUMBER | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| DVD PLAY | 1.43 | 1.65 | 2.00 | 0 | 1.76 | 0 | 1.80 | 1.70 |
| PIN'S NUMBER | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
| DVD PLAY | 1.25 | 1.81 | 1.77 | 0.70 | 2.24 | 0 | 3.33 | 4.91 |

VOLTAGE CHART - CONTINUED

U1 (M5703T/SP3721A)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--------------|------|------|------|------|------|------|------|------|
| DVD PLAY | 3.56 | 3.56 | 2.51 | 2.51 | 3.50 | 3.50 | 3.50 | 3.50 |
| PIN'S NUMBER | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| DVD PLAY | 3.52 | 0 | 0 | 2.54 | 2.54 | 2.57 | 3.01 | 2.53 |
| PIN'S NUMBER | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| DVD PLAY | 4.29 | 2.51 | 0 | 0 | 0.17 | 3.33 | 0 | 5.00 |
| PIN'S NUMBER | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
| DVD PLAY | 0 | 2.51 | 2.51 | 5.01 | 0.12 | 2.73 | 2.56 | 5.01 |
| PIN'S NUMBER | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| DVD PLAY | 0 | 4.24 | 0 | 3.20 | 0 | 3.34 | 4.95 | 3.23 |
| PIN'S NUMBER | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 |
| DVD PLAY | 2.52 | 2.49 | 1.83 | 4.28 | 3.96 | 3.33 | 0 | 0 |
| PIN'S NUMBER | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 |
| DVD PLAY | 0 | 0 | 2.50 | 2.52 | 0 | 3.47 | 0.59 | 2.34 |
| PIN'S NUMBER | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 |
| DVD PLAY | 2.98 | 5.01 | 3.53 | 3.53 | 3.80 | 3.80 | 3.54 | 1.41 |

U5 (M5705)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------|------|------|------|------|------|------|------|------|------|
| DVD PLAY | 0 | 2.50 | 2.48 | 5.01 | 2.49 | 2.51 | 3.34 | 1.26 | 2.49 | 3.12 |
| PIN'S NUMBER | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| DVD PLAY | 2.56 | 2.48 | 2.51 | 5.01 | 2.11 | 0 | 0.10 | 2.51 | 2.51 | 2.51 |
| PIN'S NUMBER | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| DVD PLAY | 2.52 | 0 | 2.52 | 2.49 | 1.95 | 5.01 | 3.21 | 0 | 0 | 0 |
| PIN'S NUMBER | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| DVD PLAY | 3.34 | 0 | 0 | 2.62 | 3.34 | 0 | 0 | 0 | 3.34 | 1.65 |
| PIN'S NUMBER | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| DVD PLAY | 4.86 | 0 | 0 | 4.86 | 0 | 0 | 2.62 | 3.33 | 2.59 | 3.31 |
| PIN'S NUMBER | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| DVD PLAY | 2.60 | 2.60 | 0 | 0 | 0 | 2.59 | 1.66 | 0 | 0 | 0 |
| PIN'S NUMBER | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| DVD PLAY | 0 | 1.59 | 1.89 | 1.72 | 0.22 | 1.70 | 2.01 | 2.01 | 1.76 | 2.62 |
| PIN'S NUMBER | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| DVD PLAY | 2.59 | 0 | 0 | 0 | 1.78 | 3.34 | 1.82 | 1.82 | 2.14 | 2.10 |
| PIN'S NUMBER | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| DVD PLAY | 1.51 | 1.75 | 2.00 | 1.97 | 1.97 | 1.98 | 1.91 | 0 | 0.60 | 2.23 |
| PIN'S NUMBER | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| DVD PLAY | 1.63 | 2.60 | 3.30 | 3.09 | 1.05 | 1.53 | 2.60 | 1.90 | 0.10 | 0 |
| PIN'S NUMBER | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 |
| DVD PLAY | 4.09 | 3.99 | 1.25 | 0 | 0 | 1.71 | 1.35 | 0 | 1.58 | 0 |
| PIN'S NUMBER | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 |
| DVD PLAY | 0.88 | 1.26 | 0.75 | 1.30 | 3.34 | 0 | 1.68 | 0 | 0.99 | 0.66 |
| PIN'S NUMBER | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 |
| DVD PLAY | 0 | 0 | 0 | 0 | 0 | 1.89 | 1.90 | 0 | 1.81 | 0 |
| PIN'S NUMBER | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 |
| DVD PLAY | 1.81 | 1.58 | 0 | 1.83 | 0 | 1.94 | 1.89 | 0 | 0 | 0 |
| PIN'S NUMBER | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 |
| DVD PLAY | 0 | 0 | 1.70 | 0 | 3.09 | 3.34 | 0 | 0 | 0.30 | 0 |
| PIN'S NUMBER | 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 |
| DVD PLAY | 0 | 0 | 0 | 0 | 0.25 | 0.20 | 0 | 0 | 0 | 0 |
| PIN'S NUMBER | 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 | 169 | 170 |
| DVD PLAY | 0 | 3.34 | 0.12 | 0.11 | 0 | 2.51 | 2.51 | 0 | 2.68 | 0 |
| PIN'S NUMBER | 171 | 172 | 173 | 174 | 175 | 176 | | | | |
| DVD PLAY | 2.51 | 2.51 | 2.51 | 2.51 | 2.51 | 1.75 | | | | |

VOLTAGE CHART - CONTINUED

U3 (BA033FP)

| PIN'S NUMBER | 1 | 2 | 3 |
|--------------|------|---|------|
| DVD PLAY | 4.95 | 0 | 3.35 |

U9 (XC61AN1902MR)

| PIN'S NUMBER | 1 | 2 | 3 |
|--------------|------|------|---|
| DVD PLAY | 4.88 | 3.47 | 0 |

U2 (BA5983FM)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------|------|------|------|------|------|------|------|------|------|
| DVD PLAY | 2.49 | 2.51 | 2.51 | 2.46 | 2.51 | 0 | 2.53 | 0 | 3.32 | 4.88 |
| PIN'S NUMBER | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| DVD PLAY | 2.40 | 2.53 | 2.51 | 2.41 | 2.24 | 2.08 | 3.52 | 0.76 | 4.88 | 3.68 |
| PIN'S NUMBER | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | | |
| DVD PLAY | 0 | 2.84 | 2.51 | 2.51 | 2.48 | 2.51 | 2.51 | 4.90 | | |

U29 (BA17805FP)

| PIN'S NUMBER | 1 | 2 | 3 |
|--------------|-------|---|------|
| DVD PLAY | 11.44 | 0 | 5.02 |

U4 (FAN8082)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--------------|---|------|------|------|------|-------|-------|------|
| DVD PLAY | 0 | 0.37 | 0.19 | 1.44 | 1.44 | 12.16 | 12.17 | 0.37 |

U27 (LD1117S)

| PIN'S NUMBER | 1 | 2 | 3 | 4 |
|--------------|------|------|------|------|
| DVD PLAY | 1.85 | 1.85 | 3.31 | 0.59 |

U28 (LD1117S33C)

| PIN'S NUMBER | 1 | 2 | 3 | 4 |
|--------------|---|------|------|------|
| DVD PLAY | 0 | 3.30 | 4.95 | 3.30 |

U6 (M11B416256A-35J)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------|------|------|------|------|------|------|------|------|------|
| DVD PLAY | 4.94 | 1.54 | 1.54 | 1.10 | 1.30 | 4.95 | 0.80 | 0.56 | 0.65 | 0.54 |
| PIN'S NUMBER | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| DVD PLAY | 0 | 0 | 3.33 | 3.31 | 0 | 0.10 | 0.20 | 0.11 | 0.15 | 4.94 |
| PIN'S NUMBER | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| DVD PLAY | 0 | 0.24 | 0.25 | 0.30 | 0.23 | 0.33 | 0.22 | 3.18 | 3.21 | 0 |
| PIN'S NUMBER | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| DVD PLAY | 1.97 | 1.94 | 1.94 | 1.95 | 0 | 1.83 | 1.85 | 0 | 1.93 | 0 |

TUNER SECTION

TEST CONDITION: SET AM/FM ON ONE FREQUENCY

IC401 (TA2099N)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--------------|------|------|------|------|------|------|------|------|
| AM | 1.97 | 2.72 | 0.11 | 1.97 | 1.34 | 6.37 | 0.48 | 0 |
| FM | 1.95 | 2 | 0 | 2 | 0.97 | 7.43 | 1.29 | 0 |
| PIN'S NUMBER | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| AM | 4.96 | 0.04 | 5.68 | 0.76 | 0.77 | 0.11 | 4.89 | 4.92 |
| FM | 4.98 | 4 | 4.13 | 0.77 | 0.77 | 0.00 | 0.52 | 0.65 |
| PIN'S NUMBER | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| AM | 1.19 | 0.48 | 2.05 | 1.81 | 1.97 | 1.97 | 6.43 | 1.97 |
| FM | 1.19 | 1.32 | 1.99 | 2.44 | 1.97 | 1.97 | 7.40 | 1.97 |

VOLTAGE CHART - CONTINUED

IC402 (TC9257F)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------|------|------|------|------|------|------|------|------|------|
| AM | 2.45 | 2.47 | 4.29 | 4.29 | 0.01 | 0.14 | 0.02 | 0.11 | 0.02 | 0.02 |
| FM | 2.38 | 2.41 | 4.97 | 4.97 | 0 | 0.14 | 0 | 0.11 | 0 | 0 |
| PIN'S NUMBER | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| AM | 4.97 | 4.97 | 0 | 2.43 | 0 | 2.44 | 1.44 | 1.37 | 1.15 | 1.14 |
| FM | 0 | 0 | 0 | 2.36 | 0 | 2.36 | 0.17 | 0.17 | 0.76 | 1.08 |

IC403 (BU1923F)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--------------|------|------|------|------|------|------|----|------|
| FM | 2.13 | 2.41 | 2.30 | 2.27 | 4.30 | 0 | 0 | 2.29 |
| PIN'S NUMBER | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| FM | 0 | 0 | 0 | 4.30 | 0 | 2.06 | 0 | 2.25 |

SUB-WOOFER PORTION

TEST CONDITION: DVD PLAY

IC601 (STK402)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--------------|--------|-------|-------|-------|-------|----|--------|--------|
| | -0.16 | -0.17 | -0.16 | -0.17 | 0 | 0 | 30.50 | -30.50 |
| PIN'S NUMBER | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | -30.50 | 30.30 | 0 | 0 | 27.30 | 0 | -26.90 | -0.16 |

| PIN'S NUMBER | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|--------------|-------|--------|-------|-------|-------|-------|----|--------|
| | -0.16 | -25.50 | -0.16 | -0.16 | -0.16 | -0.16 | 0 | -26.90 |

IC901 (STK404)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------|------|---|--------|-------|------|-------|--------|-------|----|
| | 0.15 | 0.15 | 0 | -30.30 | 12.04 | 1.20 | -1.05 | -30.50 | 30.50 | 0 |

IC951 (BA4558N)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--------------|---|---|---|--------|---|---|---|-------|
| | 0 | 0 | 0 | -10.60 | 0 | 0 | 0 | 10.40 |

IC952 (BA4558N)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--------------|---|---|---|--------|---|---|---|-------|
| | 0 | 0 | 0 | -10.55 | 0 | 0 | 0 | 10.43 |

IC953 (BA4558N)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--------------|---|---|---|--------|---|---|---|-------|
| | 0 | 0 | 0 | -10.70 | 0 | 0 | 0 | 10.43 |

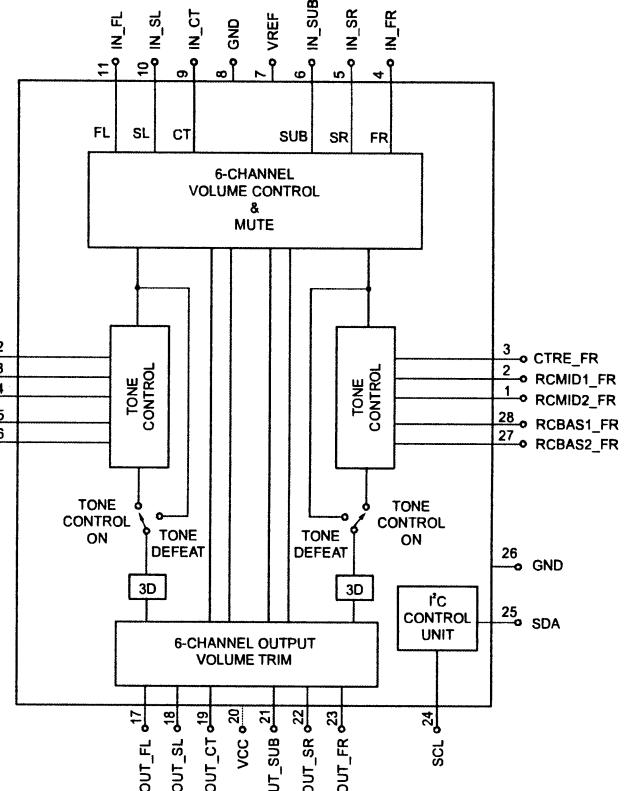
IC954 (BA4558N)

| PIN'S NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--------------|------|------|---|-------|------|------|------|-------|
| | 0.14 | 0.14 | 0 | 10.72 | 0.15 | 0.15 | 0.15 | 10.43 |

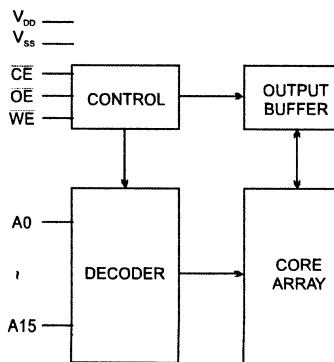
| TRANSISTOR | Q851(8050) | | | Q802(8550) | | |
|------------|------------|-------|-------|------------|--------|--------|
| | E | C | B | E | C | N |
| | 11.74 | 14.36 | 12.42 | -12.05 | -15.74 | -12.68 |

IC BLOCK DIAGRAMS & IC PINS DESCRIPTION

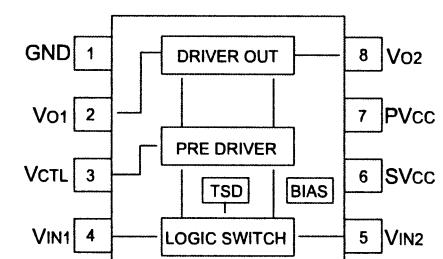
IC504 PT2322-S

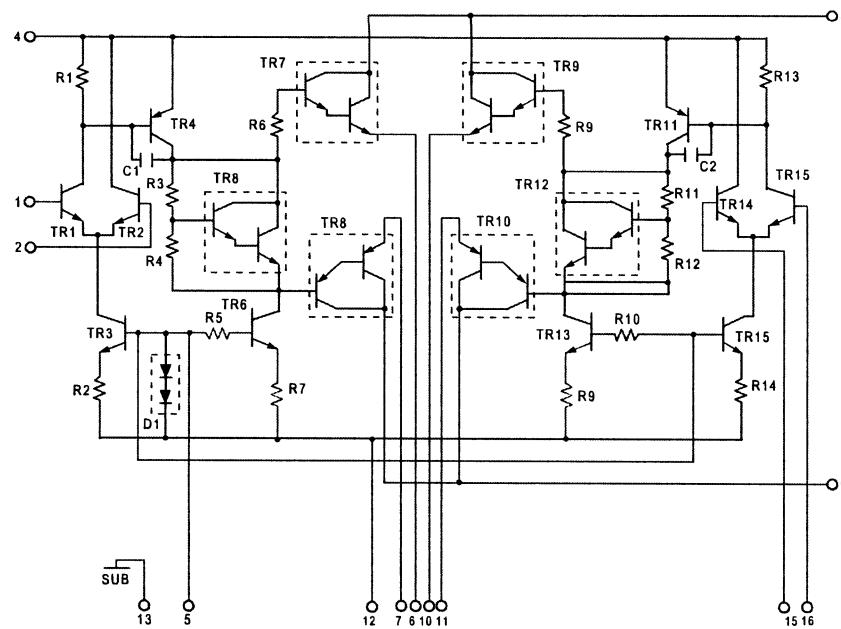
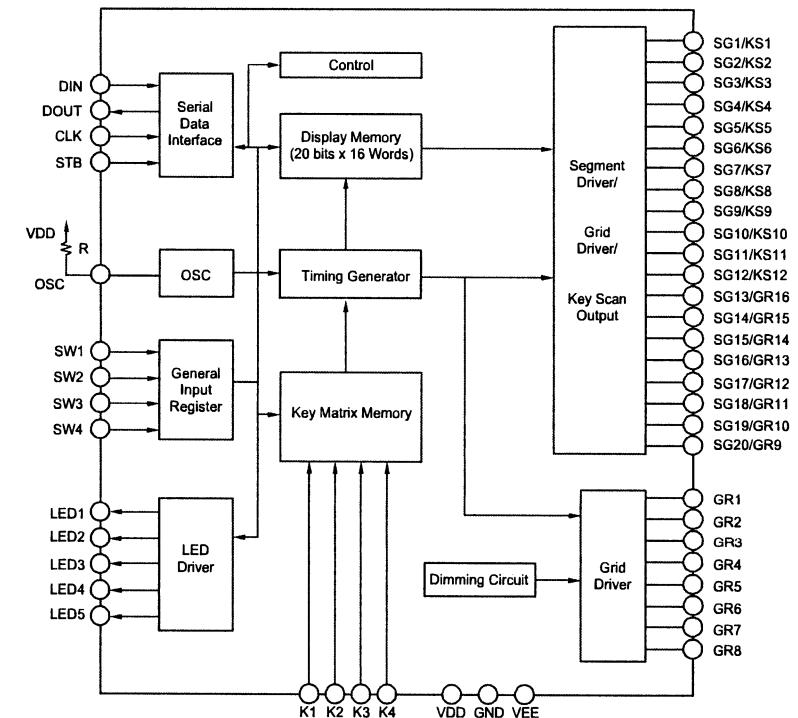
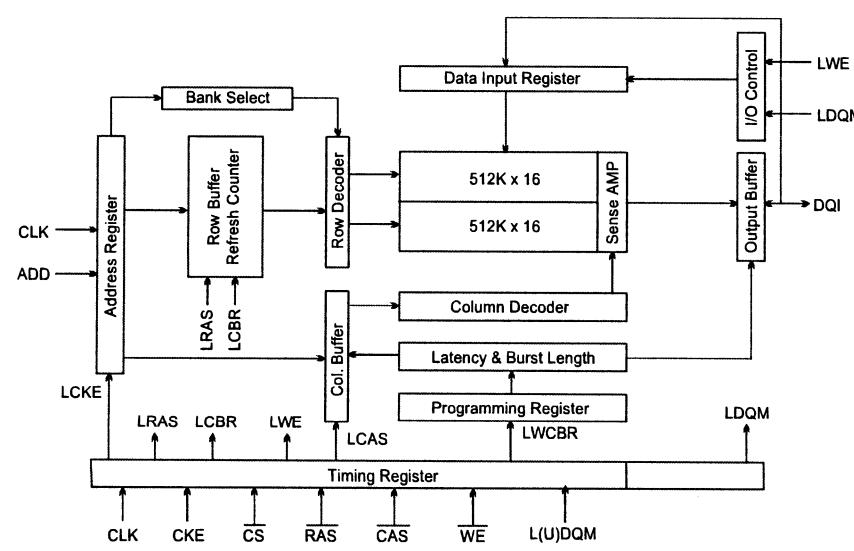
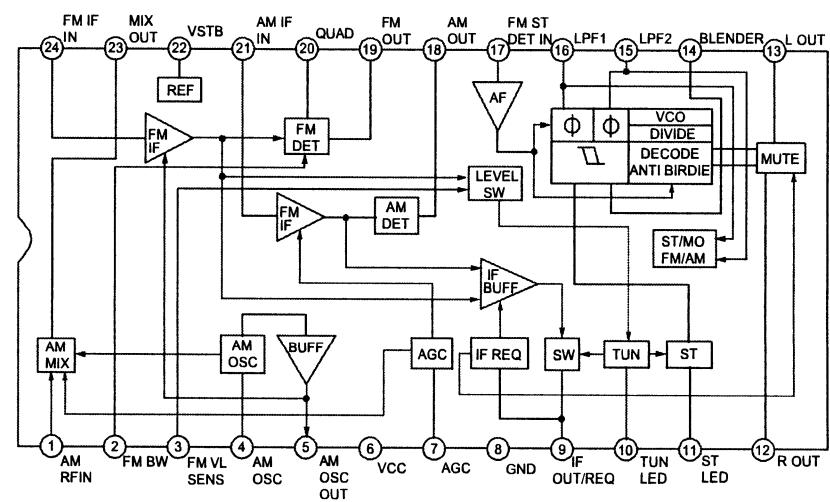


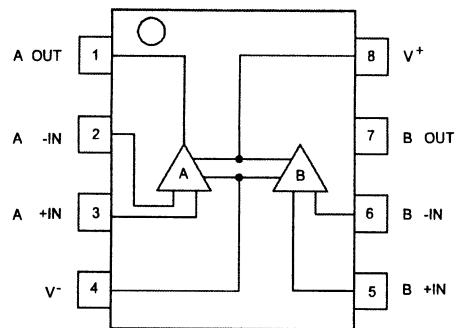
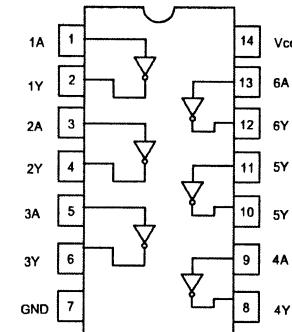
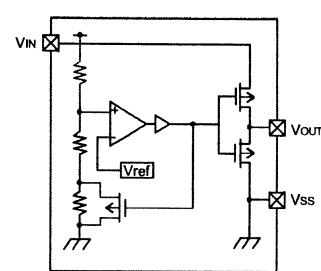
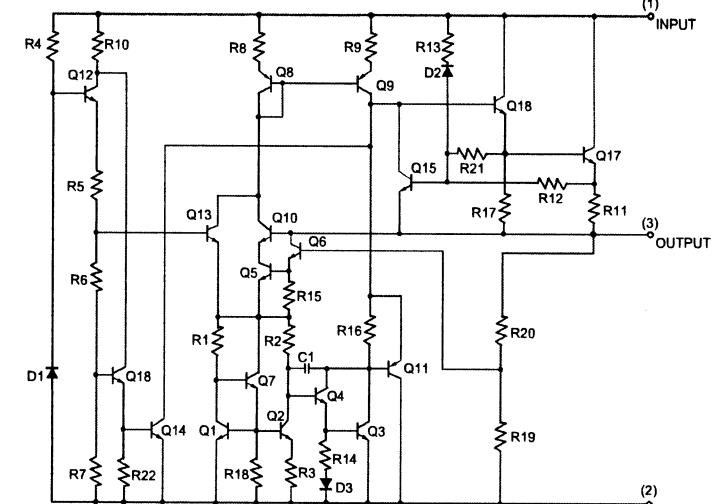
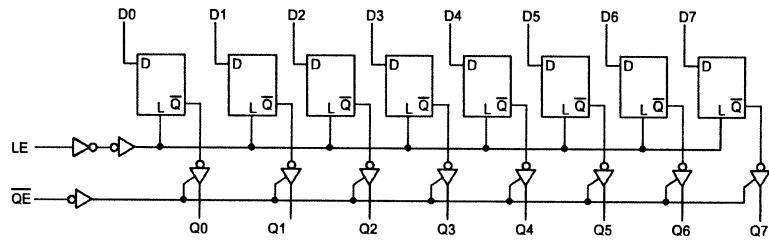
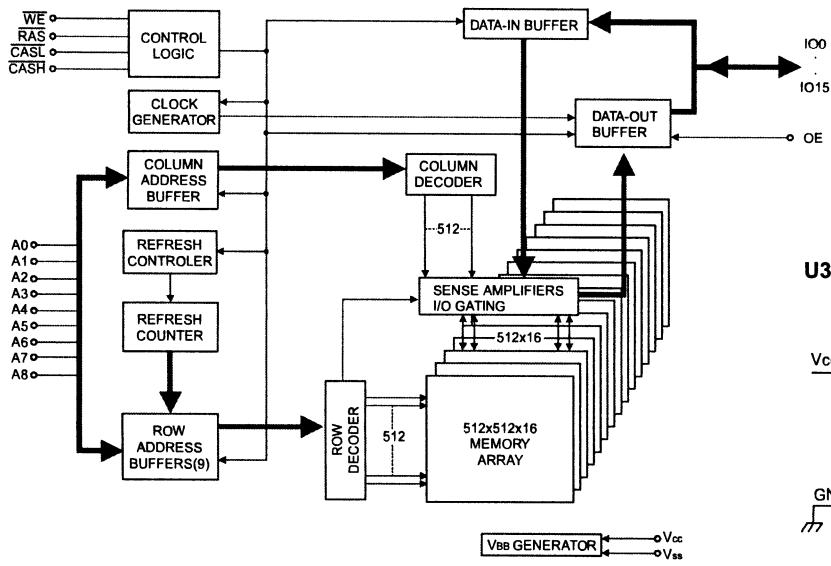
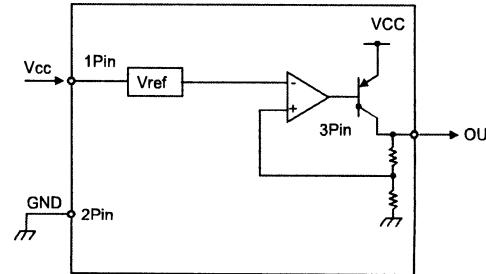
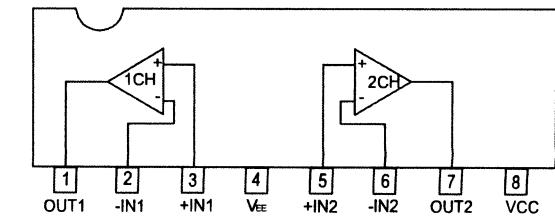
U7 W29EE512P-70



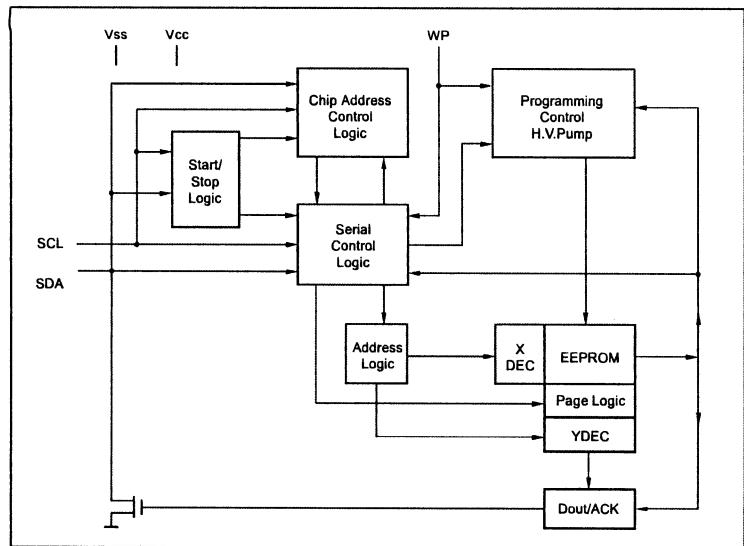
U4 FAN8082



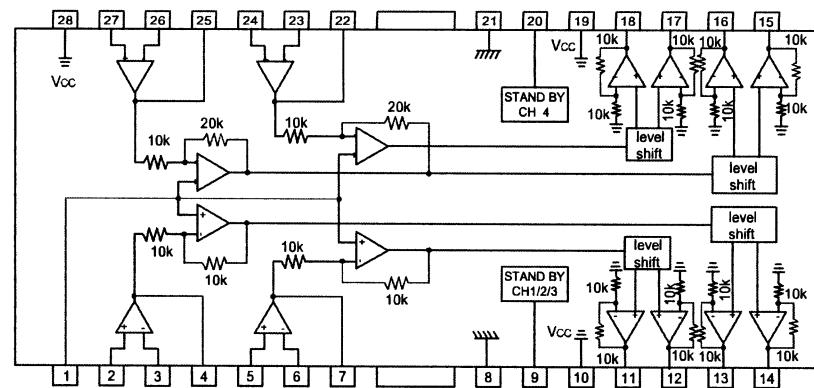
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U22, U23, U24 NJM4580E**U26 TC74HCU04AF****U9 XC61AN1902MR****U29 BA17805FP****IC302 TC74HC373AF****U6 M11B416256A****U3 BA033FP****IC502, IC951, IC952, IC953, IC954 BA4558N**

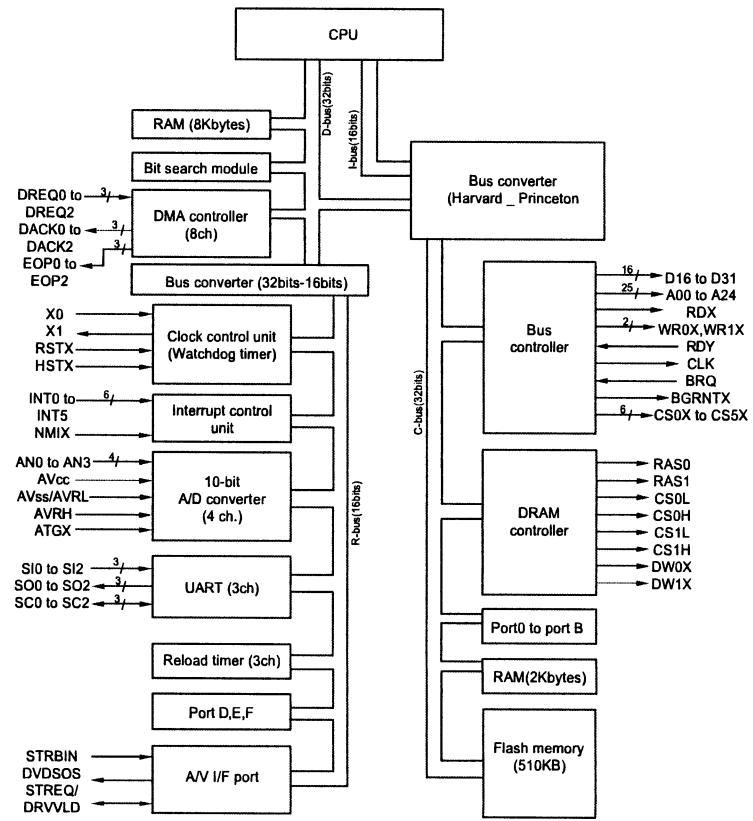
U12 AT24C01A/S-24C01BFJ



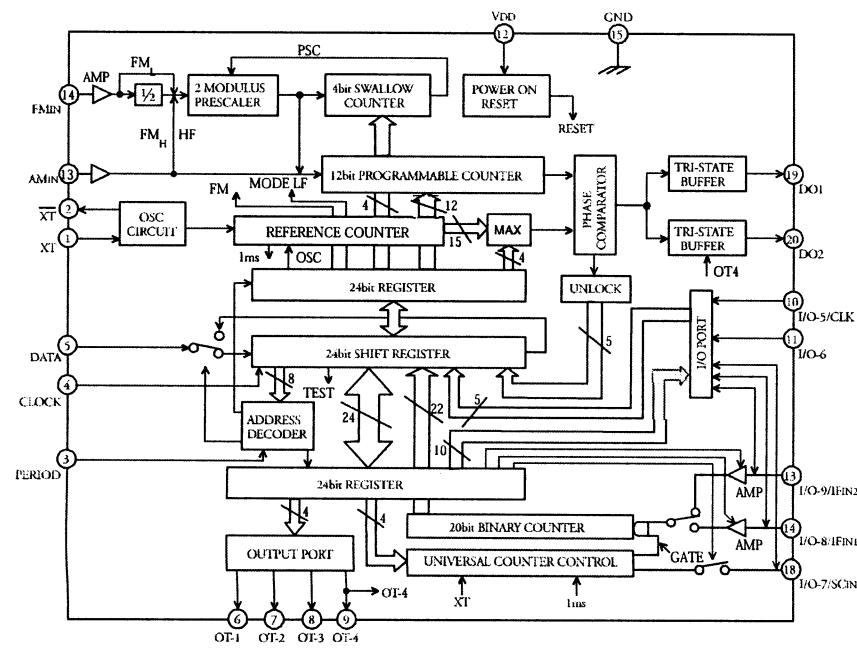
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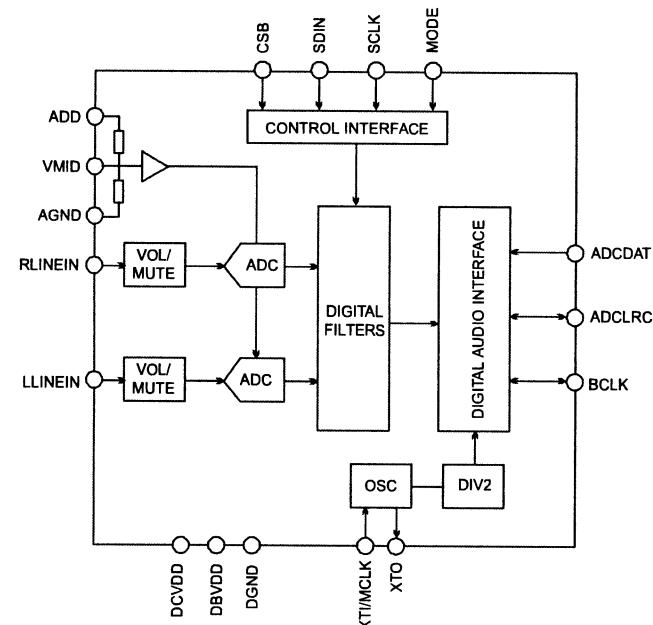
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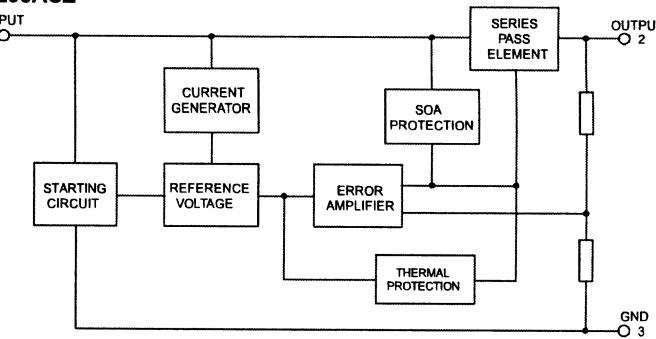
IC402 TC9257F



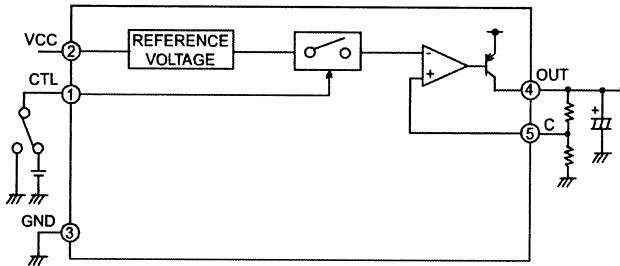
U25 WM8739



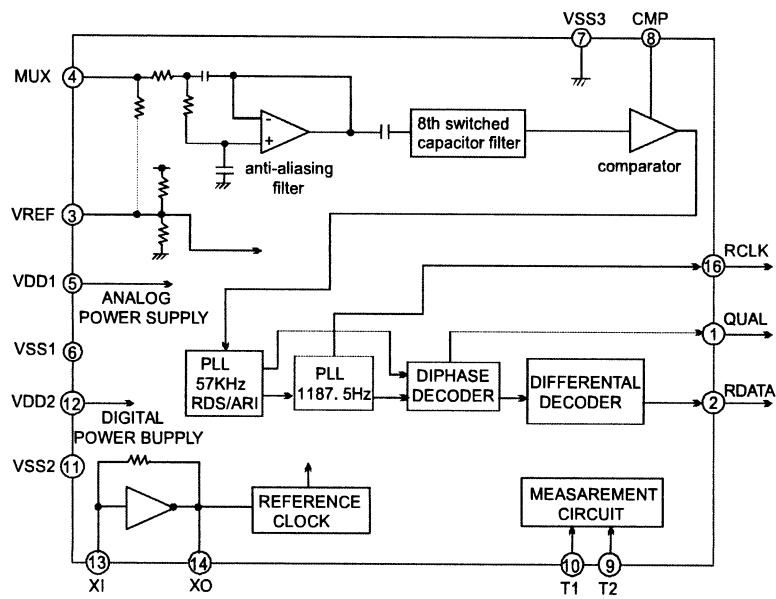
IC801 LM78L05ACZ



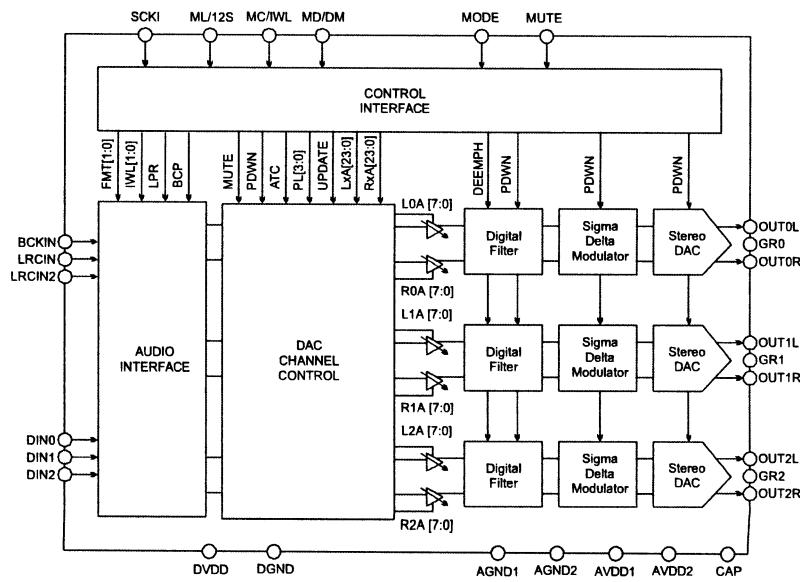
IC802, IC803 BA05ST



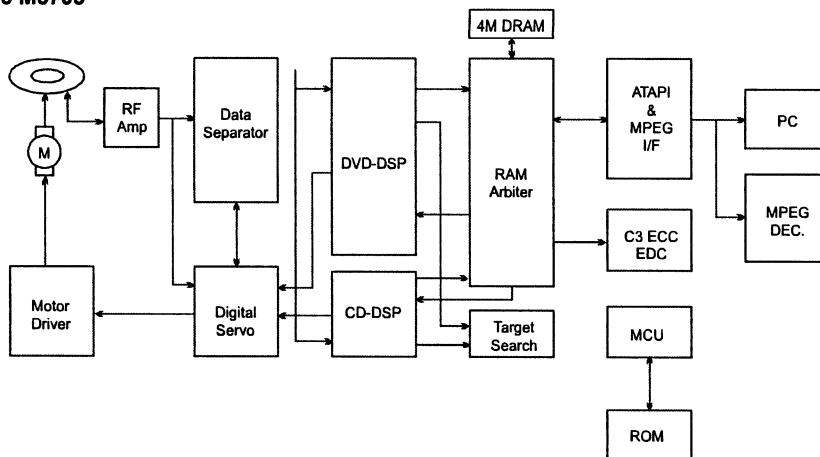
IC403 BU1923F



U31 WM8746EDS



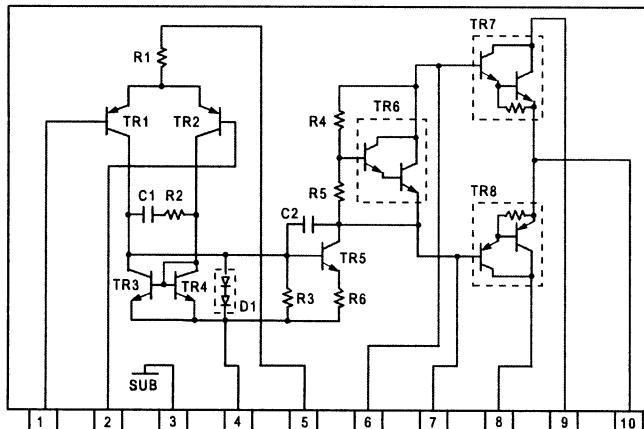
U5 M5705



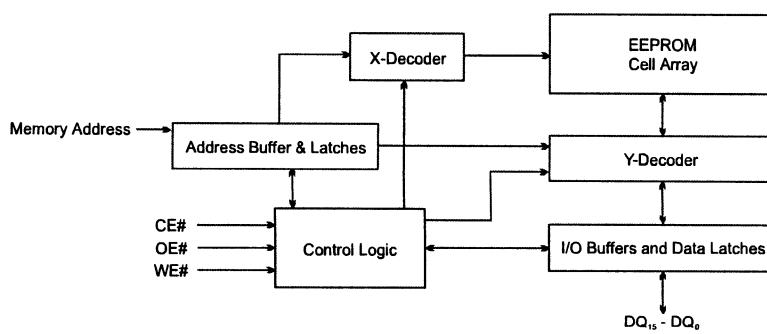
IC301 TMP-87EP26F PINS DESCRIPTION

| Pin | Port Name | Pin Name | Description |
|-----|------------------|-----------------|---------------------------------|
| 1 | VSS | VSS | Ground |
| 2 | XOUT | XOUT | 8MHz |
| 3 | XIN | XIN | 8MHz |
| 4 | /RESET | RESET | |
| 5 | P2.2(XTOUT) | CS | CS to Display driver |
| 6 | P2.1(XTIN) | CLK | Clock to Display driver |
| 7 | TEST | TEST | |
| 8 | P2.0 (INT5/STOP) | STOP* | Power Down detector |
| 9 | P4.0 (INT3/TC3) | IR* | Remote controller |
| 10 | P4.1 (PWM/PDO) | CLKSHIFT | Clock shift on tuner |
| 11 | P4.2 (SCK1) | RDSCLK* | RDS Clock input pin |
| 12 | P4.3 (SI1) | REDSDAT* | RDS Data input pin |
| 13 | P4.4 (SO1) | Tuner/-DVD | Selection of Tuner or DVD |
| 14 | P4.5 (SCK2) | DVD-VCLK* | DVD VFD Clock pin |
| 15 | P4.6 (SI2) | DVD-VDAT* | DVD VFD Data pin |
| 16 | P4.7 (SO2) | | |
| 17 | P0.0 | /OE | 373 OE pin |
| 18 | P0.1 | LE | 373 LE pin |
| 19 | P0.2 | DOUT | Data input from Display Driver |
| 20 | P0.3 | PLL-CLK | Tuner Clock pin |
| 21 | P0.4 | PLL-PERIOD | Tuner Period pin |
| 22 | P0.5 | STEREO | Tuner STEREO input pin |
| 23 | P0.6 | DVD-ACT | (Not used) |
| 24 | P0.7 | DVD-IR | IR signal to DVD |
| 25 | P1.0 (/INT0) | SHORT-CIRCUIT | Speaker Short circuit detect |
| 26 | P1.1 (INT1) | | |
| 27 | P1.2 (INT2/TC1) | DVD-VCS | DVD CS to Display driver |
| 28 | P1.3 (DVO) | CH-MUTE | |
| 29 | P1.4 (PPG) | AUX | Channel Mute pin |
| 30 | P1.5 (TC2) | DVD-PWR | AUX Channel Selection |
| 31 | P1.6 | MAIN-PWR | DVD Power control pin |
| 32 | P1.7 | SYSMUTE | Main Power control pin |
| 33 | P3.0 | VRDDIN | System Mute |
| 34 | P3.1 | VFDCS | Data output to Display driver |
| 35 | P3.2 | VFDCLK | Clock to Display driver |
| 36 | P3.3 | PLL-DATA | Tuner Data pin |
| 37 | P3.4 | SCL | I2C Clock pin for Volume IC |
| 38 | P3.5 | SDA | I2C Data pin for Volume IC |
| 39 | P3.6 | CH-MUTE | Channel mute pin |
| 40 | P5.0 (AIN0) | COUNTRY | Tuner Country selection |
| 41 | P5.1(AIN1) | SIGNAL-DET | Tuner Signal Strength detection |
| 42 | P5.2 (AIN2) | JOG-VOL+ | Jogger Volume + |
| 43 | P5.3 (AIN3) | JOG-VOL- | Jogger Volume - |
| 44 | P5.4 (AIN4) | KEY0 | Keyboard |
| 45 | P5.5 (AIN5) | | |
| 46 | P5.6 (AIN6) | AM-STEP | Tuner AM Step selection |
| 47 | P5.7 (AIN7) | | |
| 48 | VAREF | VAREF | Analog VCC |
| 49 | BOOT | BOOT(H-Program) | Program Data to EEPROM |
| 50 | VSS | VSS | Ground |
| 51 | VDD | VDD | +5V |
| 52 | P8.0 (SEG39) | | |
| 53 | P8.1 (SEG38) | | |
| 54 | P8.2 (SEG37) | | |

IC901 STK404



U13 SST39VF800A



IC301 TMP-87EP26F PINS DESCRIPTION - CONTINUED

| Pin | Port Name | Pin Name | Description |
|-----|-----------|--------------|---------------------------------------|
| 55 | | P8.3 (SEG36) | |
| 56 | | P8.4 (SEG35) | |
| 57 | | P8.5 (SEG34) | |
| 58 | | P8.6 (SEG33) | |
| 59 | | P8.7 (SEG32) | |
| 60 | | P7.0 (SEG31) | |
| 61 | | P7.1 (SEG30) | |
| 62 | | P7.2 (SEG29) | |
| 63 | | P7.3 (SEG28) | |
| 64 | | P7.4 (SEG27) | |
| 65 | | P7.5 (SEG26) | |
| 66 | | P7.6 (SEG25) | |
| 67 | | P7.7 (SEG24) | |
| 68 | | P6.0 (SEG23) | |
| 69 | | P6.1 (SEG22) | RVS_SW 3-CD Tokyo Pigeon Changer |
| 70 | | P6.2 (SEG21) | FWD_SW 3-CD Tokyo Pigeon Changer |
| 71 | | P6.3 (SEG20) | OPCL_SW 3-CD Tokyo Pigeon Changer |
| 72 | | P6.4 (SEG19) | CN1_SW 3-CD Tokyo Pigeon Changer |
| 73 | | P6.5 (SEG18) | CN2_SW 3-CD Tokyo Pigeon Changer |
| 74 | | P6.6 (SEG17) | HOME_SW 3-CD Tokyo Pigeon Changer |
| 75 | | P6.7 (SEG16) | EXTRA_SW 3-CD Tokyo Pigeon Changer |
| 76 | | P9.0 (SEG15) | CMF 3-CD Tokyo Pigeon Changer |
| 77 | | P9.1 (SEG14) | DMR 3-CD Tokyo Pigeon Changer |
| 78 | | P9.2 (SEG13) | DMF 3-CD Tokyo Pigeon Changer |
| 79 | | P9.3 (SEG12) | DMR 3-CD Tokyo Pigeon Changer |
| 80 | | SEG11 | |
| 81 | | SEG10 | |
| 82 | | SEG9 | |
| 83 | | SEG8 | |
| 84 | | SEG7 | |
| 85 | | SEG6 | |
| 86 | | SEG5 | |
| 87 | | SEG4 | |
| 88 | | SEG3 | |
| 89 | | SEG2 | |
| 90 | | SEG1 | |
| 91 | | SEG0 | |
| 92 | | COM3 | |
| 93 | | COM2 | |
| 94 | | COM1 | |
| 95 | | COM0 | |
| 96 | VLC | LCD Power | |
| 97 | PDO | | |
| 98 | PD1 | | |
| 99 | PD2 | | |
| 100 | VDD | VDD | |

U16 ZR36732PQC PINS DESCRIPTION

| Pin No. | Pin Name | Type | Description |
|------------------------------------------------|---------------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reset,Standby and Idle Status Interface | | | |
| 124 | RESET# | I | Reset input.Once de-asserted,the Decoder starts the initialization process. |
| 122 | STNDBY# | I | Stand-by input. When asserted together with RESET#, all outputs and bidirectional pins float, such that the Decoder is electrically disconnected from its surroundings. All internal clocks are disabled, and the power consumption is minimized. |
| 160 | IDLE | 3-S | Idle, Init and Reset states indication output. |
| Host Interface | | | |
| 2 | HWID | I | Determines the width of the host interface data bus.It is allowed to be changed only during RESET,A low level (GNDP) Configures the Decoder to an 8-bit host data interface, a high level (VDDP) to 16-bit width. |
| 1 | HORD | I | Determines the order of bytes on the host interface data bus in case of 16-bit width (HWID at VDDP). It is allowed to be changed only during RESET. A low level (GNDP) configures the Decoder to input/output the m.s. Byte on HD [15:8]; A high level (VDDP) to input/output the m.s.byte on HD [7:0]. Must be at GNDP if the host data bus is 8 bits. |
| 4 | HTYPE | I | Determines the protocol type for the 8 and 16 bits modes host interface.It is allowed to be changed only during RESET.A low level (GNDP) configures the Decoder to type A, a high level (VDDP) to type B. |
| 17,18 | HD[7],HD[6] | 3-S | For 16 bits mode, the 8 I.S. Data lines of host data bus. For 8 bits mode,only these signals are defined as host data signals. |
| 20,21 | HD[5],HD[4] | | |
| 22,23 | HD[3],HD[2] | | |
| 24,25 | HD[1],HD[0] | | |
| 9,11 | HD[11],HD[10] | 3-S | When HWID is connected to VDDP,these are data lines 11:8 of the 16-bit host data bus. |
| 13,15 | HD[9],HD[8] | | |
| 5,6 | HD[15],HD[14] | 3-S | When HWID is connected to VDDP,these are data lines 15:12 of the 16-bit host data bus. When HWID is connected to GNDP, these are the CD-DSP ² S input port. pins as explained in the CD-DSP pin description. |
| 7,8 | HD[13],HD[12] | | |
| 27,28 | HA[3],HA[2] | I | Host address inputs,These input signals indicate the register accessed in every cycle on the host interface. |
| 29,30 | HA[1],HA[0] | | |
| 32 | HCS# | I | Host chip-select input. |
| 31 | HWR#-HR/W# | I | In host protocol Type A (HTYPE= GNDP):HR/W# This input determines the direction of the host access. In host protocol Type B (HTYPE=VDDP):HWR#.Host write input. |
| 34 | HRD#-HDS# | I | In host protocol Type A (HTYPE = GNDP): HDS#. Data strobe input (active low) In host protocol Type B (HTYPE=VDDP):HRD#.Host read input.(active low.) |
| 36 | HRDY | 3-S | Host ready output. When this signal is tri-stated (i.e. requires a pull-up resistor), up to SysConfig.CodBurstLed bytes of code can be written to the Decoder with no need to poll its condition in between. When HRDY is low during a host access, the Decoder may still receive at least two additional bytes of code without corrupting the data. |
| 37 | HIRQ# | 3-S | Interrupt request. This output signal requests an interrupt from the host controller, if one of the events associated to interrupts occurs, and it is not masked-off. It is de-asserted if the host responds to the interrupt by reading the interrupt status register, or if the host disables the interrupt, or after RESET Deassertion of the HIRQ# output has two modes: De-activated and then tri-stated or directly to is a tri-state condition. The pin needs external pull-up resistor. |
| 39 | HACK# | HACK# | Host acknowledge output. In protocol A, the Decoder indicates that a read or write cycle is completed by asserting this output.In protocol B, this signal is used by the Decoder to indicate a wait state that may be used by fast hosts. In protocol B the host may ignore the HACK# signal. When this signal is deasserted it is de-activated and then tri-stated. This pin needs an external pull-up resistor. |

U16 ZR36732PQC PINS DESCRIPTION - CONTINUED

| Pin No. | Pin Name | Type | Description |
|---------------------------------------------|---------------------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General Purpose I/O (Host Interface) | | | |
| 134 | GPAIO | 3-S | General purpose input/output pin,monitored/controlled by the audio processor software.After RESET, this pin is defined as input.its definition can be configured through ADP commands. |
| 145 | GPSI | I | General purpose input,monitored by the system de-multiplexer/video processor software. |
| 143 | GPSO | O | General purpose output,controlled by the system de-multiplexer/video processor software. After RESET it outputs a low level. |
| DVD-DSP interface | | | |
| 151 | DVDREQ | O | DVD-DSP data request output (programmable polarity) |
| 149 | DVDVALID | I | DVD-DSP data valid input (programmable polarity) |
| 148 | DVDSSOS | I | DVD-DSP start of sector input (programmable polarity) |
| 159,158 | DVDAT[7],[6] | I | DVD-DSP data input bus. |
| 157,156 | DVDAT[5],[4] | | |
| 155,154 | DVDAT[3],[2] | | |
| 153,152 | DVDAT[1],[0] | | |
| 150 | DVDSTRB | I | DVD-DSP data bit strobe (clock)input. Programmable polarity. |
| 147 | DVDERR | I | DVD-DSP error indication input.Programmable polarity. |
| 5 | CDERR | I | When HWID is connected to GNDP, these are the CD DSP ² S input port pins as follows: CDERR: data error indication input |
| 6 | CDFRM | | |
| 7 | CDDAT | | |
| 8 | CDCLK | | |
| | | | CDCLK:bit clock input When HWID is connected to VDDP, these are HD [15:12] of the host data bus ,as explained in the host interface pin description. |
| Video Syncs and Clocks Interface | | | |
| 127 | VCLKx2 | 3-S | Main video clock.27.000MHz. |
| 92 | VCLK | 3-S | A division by two of the VCLKx2 signal. This signal is used as a sync qualifier. |
| 95 | HSYNC | 3-S | Horizontal sync. Polarity and duration are programmable. |
| 93 | VSYNC | 3-S | Vertical sync. Polarity and duration are programmable. |
| 96 | FI | 3-S | Field indication. Polarity is programmable. |
| Analog Video Encoder Interface | | | |
| 102 | CVBS/G/Y (DAC A) | O | When the Decoder outputs composite video, this line is CVBS When the Decoder outputs RGB, this line is the Green output When the Decoder outputs YUV, this line is the Y output |
| 105 | Y/R/V (DAC B) | O | When the Decoder outputs the composite video, this line is Y When the Decoder outputs RGB, this line is the Red output When the Decoder outputs YUV, this line is the V output |
| 106 | C/B/U (DAC C) | O | When the Decoder outputs the composite video, this line is C When the Decoder outputs RGB, this line is the Blue output When the Decoder outputs YUV, this line is the U output |
| 103 | CVBS/C (DAC D) | O | When the Decoder outputs any of the types of video, this line can be programmed to output either composite or C. |
| 108 | RSET | I | Resistive load for gain adjustment of the DACs |
| 111 | VREF | I | Voltage reference for gain adjustment of the DACs |
| 100 | COSYNC | 3-S | Composite sync output,Active only when RGB analog output is selected. Otherwise, the signal is low. |
| Digital Audio Interface | | | |
| 131 | AMCLK | 3-S | Audio Master Clock input/output.128,192,256 or 384 times the sampling frequency (programmable) |
| 133 | S/PDIF (AOUT[3]) | O | S/PDIF transmitter output for digital coded or reconstructed audio data. Alternately can be used as a fourth audio output. After RESET this pin outputs low level. |
| 138,137 | AOUT[2],[1] | O | Serial outputs of digital stereo audio. |
| 136 | AOUT[0] | O | |

U16 ZR36732PQC PINS DESCRIPTION - CONTINUED

| Pin No. | Pin Name | Type | Description |
|------------------------------|-------------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 113 | AIN | I | Serial input of digital stereo audio. |
| 139 | ALRCLK | O | Digital audio left/right select output for the audio port. Square wave,at the sampling frequency.Programmable polarity interpretation for input. |
| 141 | ABCLK | O | Digital audio bit-clock output. Data on AOUT and AIN is output or latched, respectively, with the rising or falling (programmable)edge of this clock. |
| PLL/Clock Interface | | | |
| 120 | GCLK | I | 27.000MHz clock or crystal input for main processing clock generation. |
| 117 | GCLK1 | I | 27.000MHz clock input for audio master clock generation.in normal operation must be connected to GCLK. |
| 119 | XO | O | Output to a crystal that is connected to GCLK. If a crystal is not used at GCLK, XO must be left not connected. |
| 115 | PLLCFG[1] | I | PLL configuration inputs. Allowed to be changed only during RESET. In normal operation both pins must be connected to GNDP |
| 118 | PLLCFG[0] | | |
| SDRAM Interface | | | |
| 90,87 | RAMDAT[15], [14],[13],[12] | 3-S | SDRAM bidirectional data bus. |
| 84,81 | | | |
| 78,75 | RAMDAT[11] | | |
| 72,68 | [10],[9],[8] | | |
| 70,74 | RAMDAT[7],[6] | | |
| 76,79 | RAMDAT[5],[4] | | |
| 82,85 | RAMDAT[3],[2] | | |
| 88,91 | RAMDAT[1],[0] | | |
| 55,53 | RAMADD[11] | O | SDRAM address bus output. |
| 54,51 | [10],[9],[8] | | |
| 48,46 | RAMADD[7],[6] | | |
| 43,41 | RAMADD[5],[4] | | |
| 42,45 | RAMADD[3],[2] | | |
| 47,50 | RAMADD[1],[0] | | |
| 60 | RAMRAS# | O | SDRAM row select output. |
| 61 | RAMCAS# | O | SDRAM column select output. |
| 66 | PCLK | O | SDRAM clock output (Same as internal processing clock) |
| 64 | RAMDQM | O | SDRAM data masking output. |
| 57 | RAMCS0# | O | SDRAM chip select output for the lower (or only) 2MB device (16Mbit) |
| 59 | RAMCS1# | O | SDRAM chip select output for the upper 2MB device (16Mbit). |
| 62 | RAMWE# | O | SDRAM write enable output. |
| Test Signal Interface | | | |
| 125 | SCNENBL | I | Production test pin (connected directly to GNDP in normal operation). |
| 129 | TESTMODE | I | In normal operation this pin must be connected directly to GNDP. |
| 112 | ICEMODE# | I | In normal operation this pin must be connected directly to VDDP.If it is asserted, then the ADP goes into ICE mode. In this mode 4 of the Decoder pins turn into ICE interface pins: HD[11] = TCK - ICE interface clock HD[10] = TMS -ICE interface mode select input HD[9] = TDO -ICE interface data output HD[8] = TDI - ICE interface data input |
| Power Signals | | | |
| 10,40,49 | GNDP | | Digital ground of 3.3 V supply. |
| 56,64,69 | | | |
| 80,86,97 | | | |
| 128,146 | | | |
| 3,16,19,26 | V _{DOP} | | 3.3V Digital power supply. |
| 38,44,52,58 | | | |
| 67,71,77,83 | | | |
| 89,94,98,99 | | | |
| 126,135,140 | | | |

U16 ZR36732PQC PINS DESCRIPTION - CONTINUED

| Pin No. | Pin Name | Type | Description |
|--------------------------|----------------------------------------------|------|---------------------------------------------------|
| 132 | GNDP-A2 | | Digital ground of filtered 3.3V supply for AMCLK. |
| 130 | VDDP-A2 | | 3.3 V filtered digital power supply for AMCLK. |
| 14,35,73 114,144 | GNDC | | Digital ground of 1.8 V supply. |
| 12,33,63 116,142 | VDDC | | 1.8 V Digital power supply |
| 123 | GNDA | | Ground plane of internal PLL circuit. |
| 121 | VDDA | | 1.8 V Power supply for internal PLL circuit. |
| 104 | VDDDAC | | 3.3 V Analog power supply for the DACs. |
| 101 107 109 110 | GNDDAC_D GNDDAC_B GNDDAC_P GNDDAC_S | | Grounds for the DACs 3.3V analog power supply |

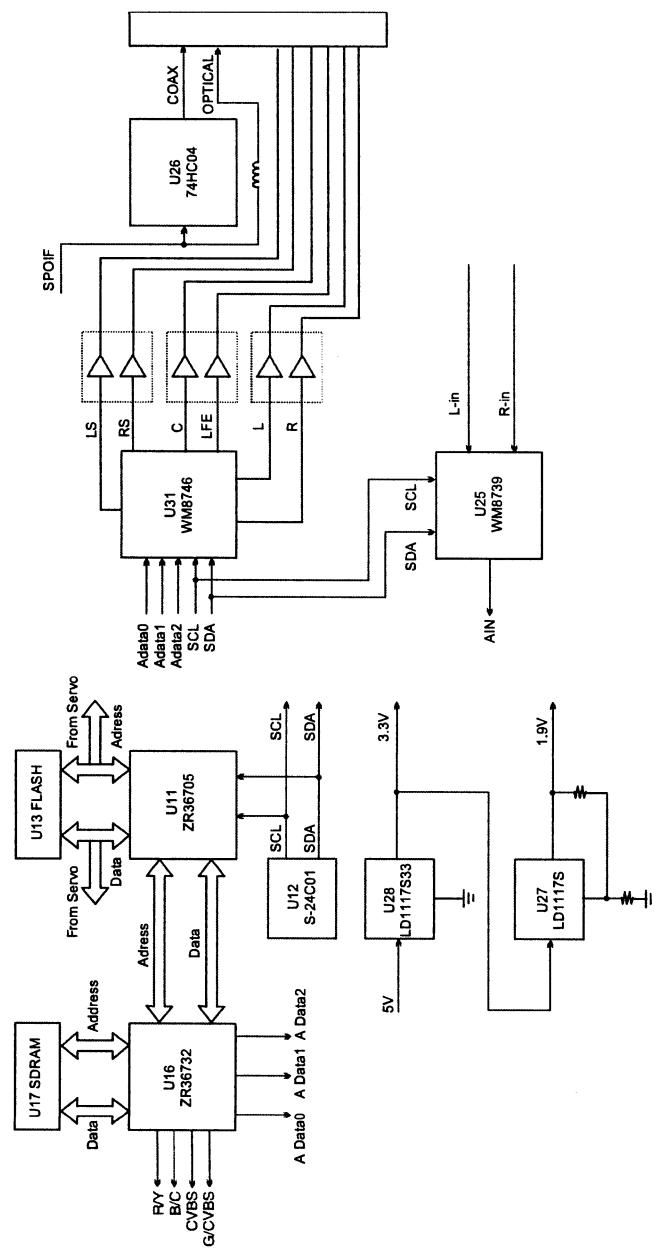
U1 5703T (SP3721A) PINS DESCRIPTION - CONTINUED

| Pin No. | Pin Name | Type | Description |
|--------------------------|----------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 37 | DFT | O | Defect Output. Pseudo CMOS output. When a defect is detected, the DFT output goes high. Also the servo AGC output can be monitored at this pin, when CAR bits 7-4 are '0011'. |
| 29 | MIRR | O | Mirror Detect Output. Mirror Detect comparator output. Pseudo CMOS output. |
| 36 | PI | O | Pull-in Signal Output. The summing signal output of A,B,C,D or PD1,PD2 for mirror detection. Reference to VCI. |
| 22 | DVDLD | O | APC output DVD APC output pin to control the laser power. |
| 24 | CDLD | O | APC output CD APC output pin to control the laser power. |
| Analog pins: | | | |
| 56 | BYP | I/O | The RF AGC integration capacitor CBYP is connected between BYP and VPA. |
| 9 | CP | I/O | Differential Phase tracking LPF pin. An external capacitance is connected between this pin and the CN pin. |
| 10 | CN | I/O | Differential Phase tracking LPF pin. An external capacitance is connected between this pin and the CP pin. |
| 45 | LCP | - | Center Error LPF Pin. An external capacitance is connected between this pin and the LCN pin. |
| 44 | LCN | - | Center Error LPF Pin. An external capacitance is connected between this pin and the LCP pin. |
| 30 | MP | - | MIRR signal Peak hold pin. An external capacitance is connected between this pin and VPB. |
| 31 | MB | - | MIRR signal Bottom hold pin. An external capacitance is connected between this pin and VPB. |
| 39 | MEV | - | Sigo Bottom Envelope pin. An external capacitance is connected between this pin and VPB. |
| 17 | CDTE | - | CD Tracking. E-F Opamp output for feedback. |
| 38 | TPH | - | PI Top Hold pin. An external capacitance is connected between this pin and VPB. |
| 26 | VC | - | Reference Voltage output. This pin provides the internal DC bias reference voltage (+2.5V fix). Output impedance is less than 50ohms. |
| 27 | VC1 | - | Reference Voltage input. DC bias voltage input for the servo input reference. |
| 18 | VC12 | - | Reference Voltage Input. DC bias voltage input for the servo input reference. |
| 55 | RX | - | reference Resistor Input. An external 8.2kohm, 1% resistor is connected from this pin to ground to establish a precise PTAT (proportional to absolute temperature) reference current for the filter. |
| 33 | MLPF | - | MIRR signal LPF pin. An external capacitance is connected between this pin and VPB. |
| 19 | NC | - | No Connect. |
| Serial Port Pins: | | | |
| 48 | SDEN | I | Serial Data Enable. Serial Enable CMOS input. A high level input enables the serial port.(not to be left open) |
| 47 | SDATA | I/O | Serial Data. Serial data bi-directional CMOS Pin. NRZ programming data for the internal registers is applied to this input.(Not to be left open). |
| 46 | SCLK | I | Serial Clock Serial Clock CMOS input. The clock applied to this pin is synchronized with the data applied to DSATA.(Not to be left open) |
| Power Pins: | | | |
| 58 | VPA | | Power. Power supply pin for the RF block and serial port. |
| 28 | VPB | | Power. Power supply pin for the servo block. |
| 50 | VNA | | Ground. Ground pin for the RF block and serial port. |
| 20 | VNB | | Ground. Ground pin for the servo block. |

U1 5703T (SP3721A) PINS DESCRIPTION

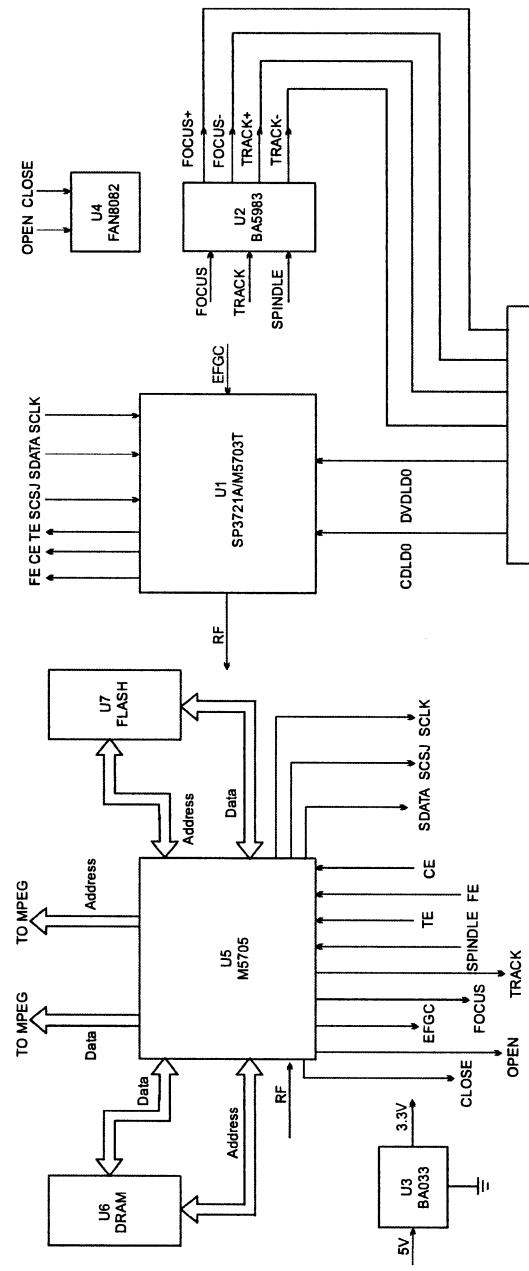
| Pin No. | Pin Name | Type | Description |
|---------------------|------------------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Input Pins: | | | |
| 1,2 | DVDRFP DVDRFN | I | RF Signal Inputs. Differential RF signal attenuator input pin. |
| 63 | CDRF | I | RF Signal input. Single-ended RF signal attenuator input pin |
| 59,60 | AIP,AIN | I | AGC Amplifier Inputs. Differential AGC amplifier input pins. |
| 53,54 | DIP,DIN | I | Analog inputs for RF single Buffer. Differential analog inputs to the RF single-ended output buffer and full wave rectifier. |
| 32 | FDCHG# | I | Low Impedance Enable. A TTL compatible input pin that activates the FDCHG switches. A low level activates the switches and the falling edge of the internal FDCHG triggers the fast decay for the MIRR bottom hold circuit.(open high) |
| 49 | HOLD1 | I | Hold Control. A TTL compatible control pin which, when pulled high, disables the RF AGC charge pump and holds the RF AGC amplifier gain at its present value.(open high) |
| 14-11 | A,B,C,D | I | Photo Detector Interface Inputs. Inputs from the main beam photo detector matrix outputs. |
| 8-5 | A2,B2,C2,D2 | I | photo Detector Interface Inputs. AC coupled inputs for the DPD from the main beam photo detector matrix outputs. |
| 16-15 | E,F | I | CD tracking Error Inputs. Inputs from the CD photo detector error outputs. |
| 3-4 | PD1,PD2 | I | CD photodetector interface inputs. From the CD photo detector error outputs. |
| 40 | MEI | I | Mirror Envelope Input. The SIGO envelope input pin. |
| 35 | MIN | I | RF signal input for Mirror.AC coupled inputs for the mirror detection circuit from, the pull-in signal output.(PI) |
| 21 | DVDPD | I | APC Input. DVD APC input pin from the monitor photo diode. |
| 23 | CDPD | I | APC Input. CD APC input pin from the monitor photo diode. |
| 25 | LDON# | I | APC Output On/Off. APC output control pin. A low level activates the LD output. (open high) |
| Output Pins: | | | |
| 62,61 | ATOP/ATON | O | Differential Attenuator Output.Attenuator outputs. |
| 52,51 | FNP,FNN | O | Differential Normal Output.Filter normal outputs. |
| 57 | SIGO | O | Single Ended Normal Output.Single-ended RF output. |
| 64 | CDRFDC | O | CD RF Signal Output.Single ended CD RF summing output. |
| 42 | FE | O | Focusing Error Signal Output. Focus error output-reference to VCI. |
| 41 | TE | O | Tracking Error Signal Output. Tracking error output reference to VCI. |
| 43 | CE | O | Center Error Signal Output. Center error output reference to VCI. |
| 34 | MEVO | O | SIGO Bottom Envelope Output.Bottom envelope for Mirror detection. |

MPEG SECTION

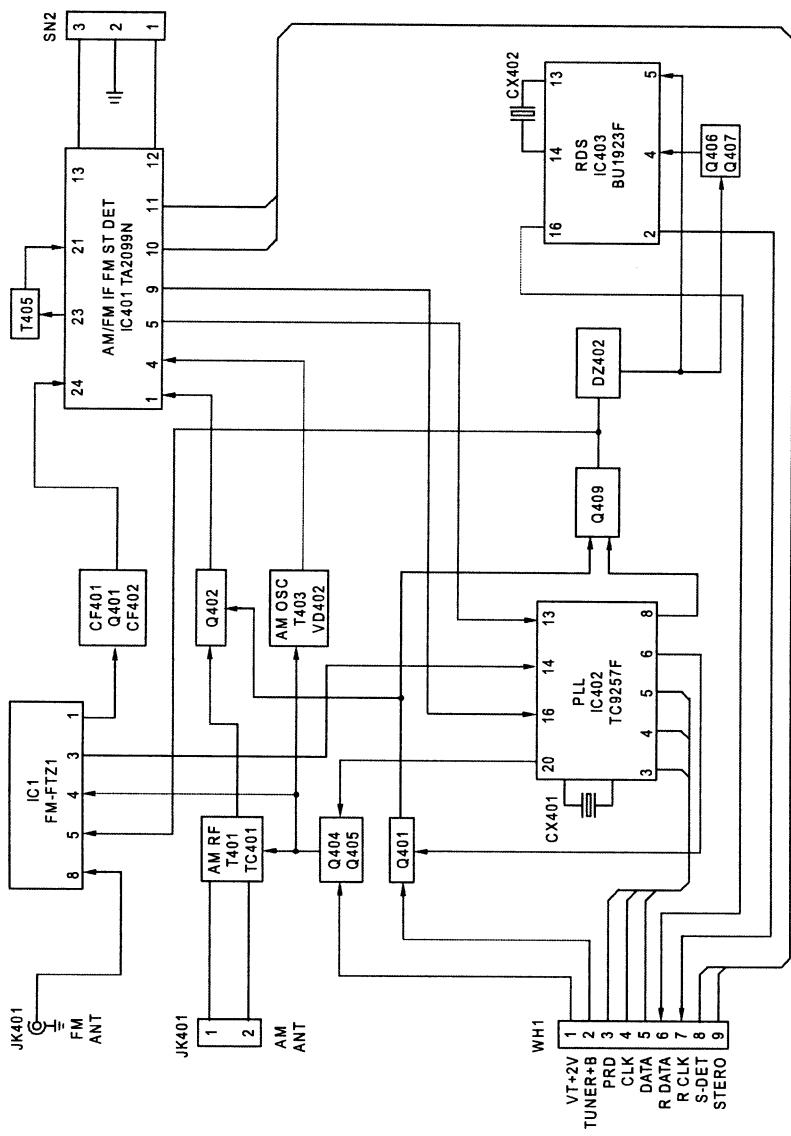


BLOCK DIAGRAMS

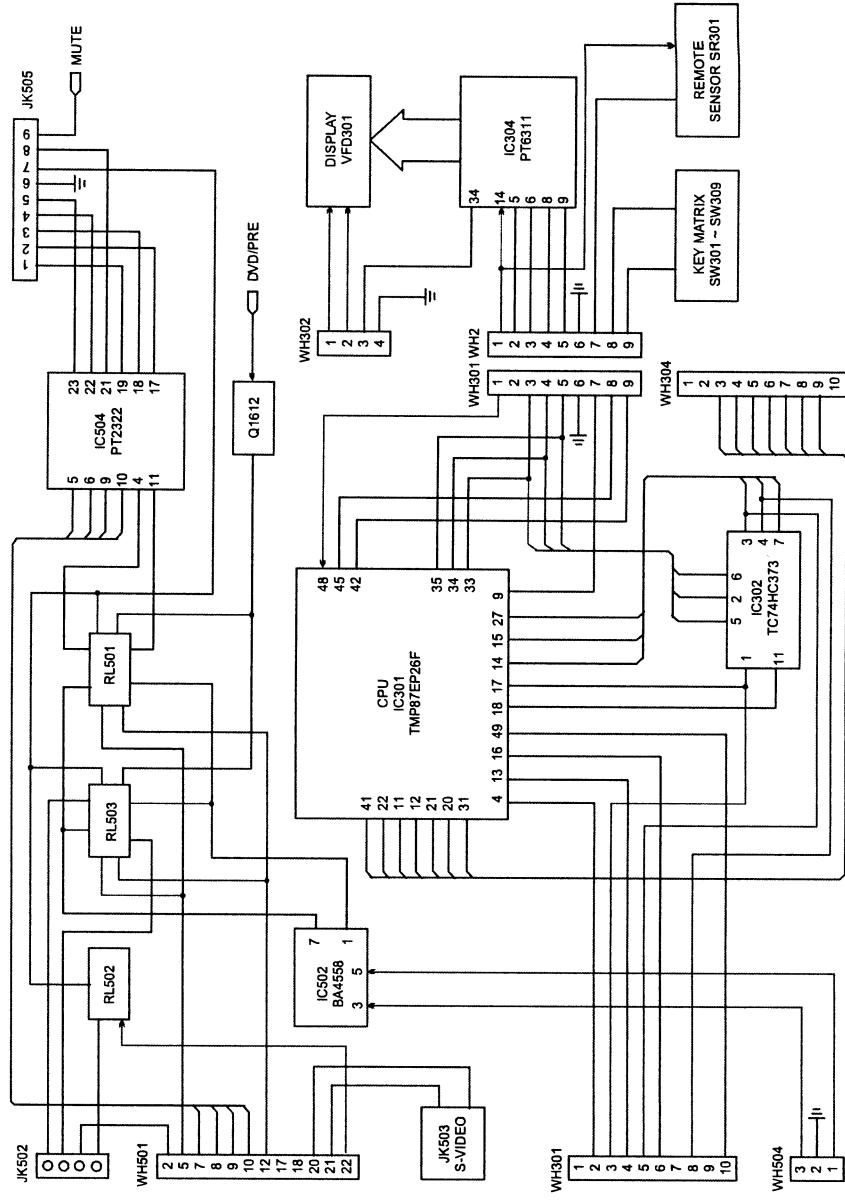
SERVO SECTION



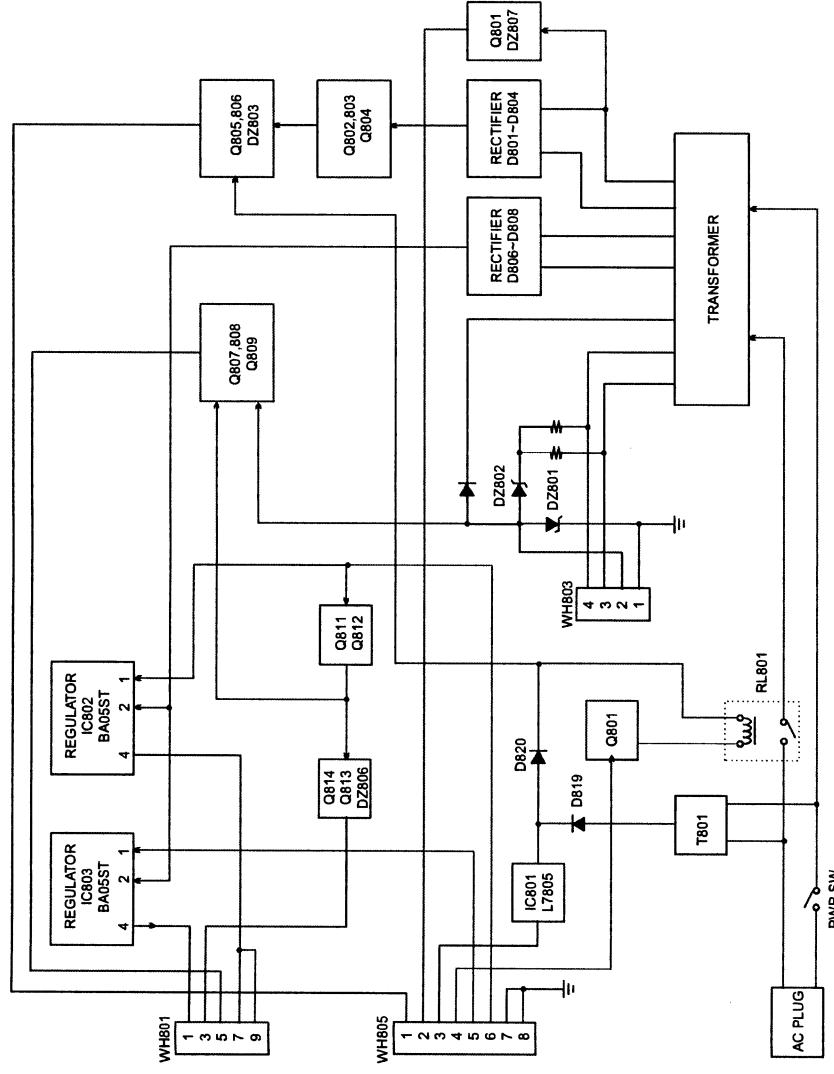
TUNER SECTION



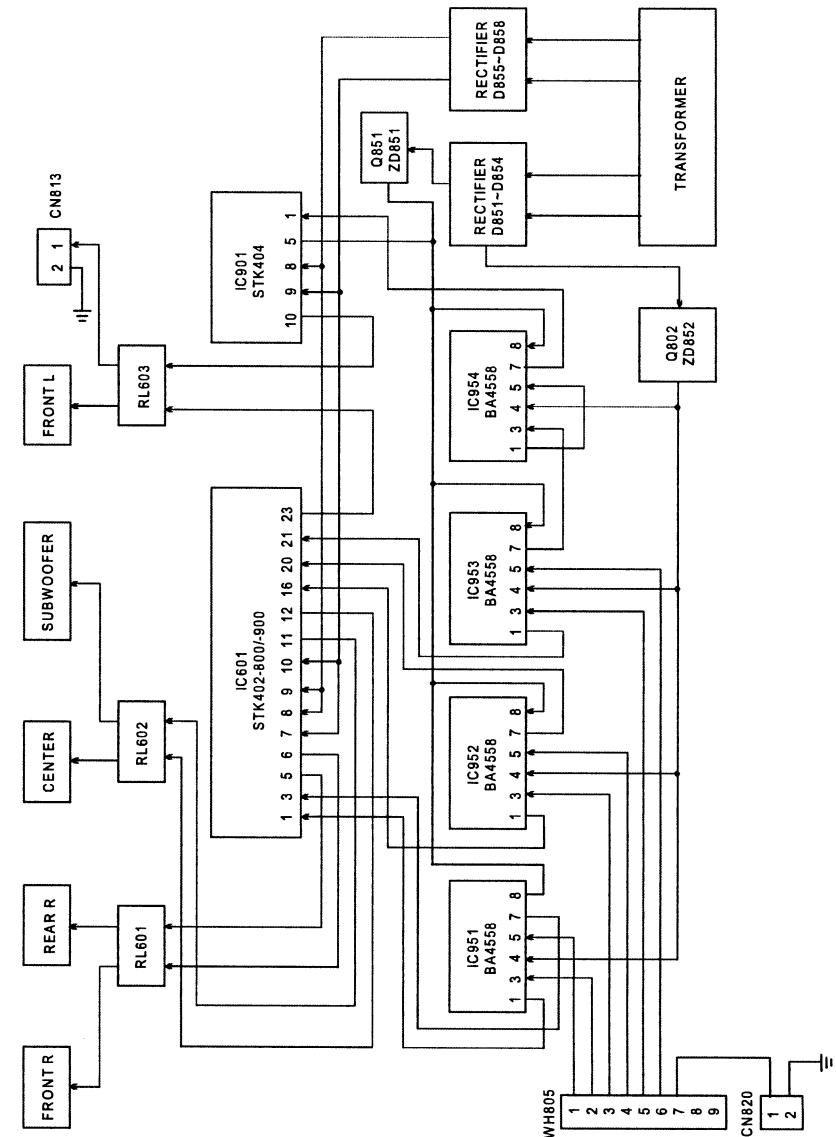
CPU & CONTROL SECTION



POWER SUPPLY SECTION



POWER AMPLIFIER SECTION FOR SUB-WOOFER



EXPLODED DRAWING PARTS LIST

| Ref. No. | Description | Mfr's Part No. | Qty. |
|------------------|--------------------------------------------------------------------------|--------------------------|-----------------|
| MAIN UNIT | | | |
| 1 | FRONT PANEL, CNS0360 (HIPS,V2) CAV:1, w/PNT (w/RDS) | 500-ST6101-xxx | 1 |
| 2 | RUBBER FOOT, 10x10x2.0mm BLACK (NC RUBBER), w/SELF-ADHESIVE | 700-630141-000 | 4 |
| 3 | HALF MIRROR LEFT TRIM, MIRROR LENS, w/PNT | 512-ST6119-xxx | 1 |
| 4 | HALF MIRROR DVD DOOR, MIRROR LENS, w/PNT | 512-ST6118-xxx | 1 |
| 5 | HALF MIRROR RIGHT TRIM, MIRROR LENS, w/PNT | 512-ST6120-xxx | 1 |
| 6 | REMOTE LENS, MOLD TRANS.GREY(J-52858) CAV:4 | 500-ST6108-000 | 1 |
| 7 | VOLUME LIGHT GUIDE, MOLD TRANS.GREEN(80355) CAV:4 | 509-ST6110-000 | 1 |
| 8 | CONTROL KNOB SET, MOLD CNS0360 (ABS) CAV:2, w/SPY, w/o PNT | 510-ST6115-xxx | 1 |
| 9 | FRONT PANEL BRACKET, 1.2mm E.G. STEEL | 605-DV3235-000 | 1 |
| 10 | POWER PCB BRACKET (A), CAV.9 (ABS) | 505-ST6111-000 | 9 |
| 11 | MPEG PCB BRACKET (B), CAV.2 (ABS) | 505-ST6112-000 | 2 |
| 12 | LED HOLDER, CAV.1 (ABS) | 505-ST6107-000 | 1 |
| 13 | VOLUME KNOB (-), MOLD GREY(CNS-0360) (ABS) CAV:2, w/SPY | 510-ST6141-xxx | 1 |
| 14 | VOLUME KNOB (+), MOLD GREY(CNS-0360) (ABS) CAV:2, w/SPY | 510-ST6104-xxx | 1 |
| 15 | VFD-2COL100x20.5SM-033P, | VFD301 | 115-001002-000 |
| | VACUUM FLUORESCENT DISPLAY #VFD20-1002 (ZEC) | | 1 |
| 16 | REMOTE SENSOR HOLDER, CAV.1 (ABS) | 505-ST6109-000 | 1 |
| 17 | DISPLAY & KEY PCB STS61AAST-01-02 | 033-STS61A-101 | 1 |
| 18 | MPEG+SERVO PCB STS21AAST-01-02 | 033-STS21A-101 | 1 |
| 19 | TUNNING PCB BRACKET, CAV.1 (ABS) | 505-ST6113-000 | 1 |
| 20 | HEATSINK, 0.5mm TIN PLATE | 2/MPEG IC | 613-DV3231-000 |
| 21 | RGB CONNECTOR SOCKET 21 PINS, HRC-021V-07, (KUNMING)/MRC-021V-04 (HONDA) | JK701 | 135-HRC021-210 |
| 22 | SCART PCB STS21AAST-01-05 | | 033-STS21A-104 |
| 23 | TUNER PCB STS21AAST-01-04 | | 033-STS21A-103 |
| 24 | OUTPUT PCB STS61AAST-01-03 | | 033-STS61A-102 |
| 25 | DVD DOOR BRACKET, MOLD BLACK (ABS) CAV:2 | | 505-ST6117-000 |
| 26 | SOCKET HOLDER, CAV.8 (ABS) | | 505-ST6136-000 |
| 27 | DVD MECHANISM w/SAMSUNG CMS-S11MG6 | | STSD-010SMT |
| 28 | TOP COVER, T=0.6mm E.G.STEEL, w/SPY w/HOLE (SAME AS DV32-13) | | 600-ST6143-xxx |
| 29 | HS&EXT-AL&-005W-0C FIRM VOLTAGE HEATSINK, (EXTRUDE AL) | 1/POWER PCB | 613-ST2112-000 |
| 30 | RECTIFIER PCB STS61AAST-01-04 | | 033-STS61A-103 |
| 31 | POWER TRANSFORMER | | 123-xxxxxx-xxxx |
| 32 | PUSH SWITCH 2P2T PS3-22SP-W4CW-3.2, w/UL/VDE SEMKO APPROVAL (LUP FUNG) | | 021-032222-000 |
| 33 | POWER KNOB, MOLD GREY(CNS-0360) (ABS) CAV:2, w/SPY | | 510-ST6106-xxx |
| 34 | BACK PLATE, 179x52.5mm, w/PNT | | 650-ST6126-xxx |
| 35 | POWER TRANSORMER | | 123-xxxxxx-xxx |
| 36 | BOTTOM CABINET, T=0.8mm (E.G.STEEL) | | 600-ST6114-000 |
| 37 | TF STEEL PLATE, 0.35mm SI STEEL (Z11) | | 650-ST6146-000 |
| | HANDLE, MOLD BLACK (P.P) CAV:4, w/RECYCLE MARK ENGRAVE | FOR CARTON | 504-ST6145-000 |
| | AUDIO OUT PLATE, S:35x31mm, R.1mm, BLK PVC, w/PNT | | 650-ST6123-xxx |
| | SCREW 3x6mm BB T.T.S. (S TYPE) NI PLATED (TSB#9878107200) | | 722-080308-060 |
| | SCREW ST3x8mm, PB BRASS BASED | 8/ELE PARTS TO B CAB | 720-050300-080 |
| | FIBRE WASHER Ø12.0xØ3.0x1.0mm | 1/TUN PCB TO TUN PCB BKT | 532-303012-100 |
| | SPRING WASHER 3mm Zn | 2/SET | 532-403000-000 |
| | | 4/TX | 532-403000-000 |

EXPLODED DRAWING PARTS LIST - CONTINUED

| Ref. No. | Description | Mfr's Part No. | Qty. |
|------------------------------------|-----------------------------------------------------------------------------|--------------------------|----------------|
| | TF PVC PLATE, 0.5mm PVC | 650-ST6137-000 | 1 |
| | FELT PAPER, BLACK, 75x6.5x0.8mm w/ADHESIVE | 700-3D5256-000 | 1 |
| | *Cdf SPK. BOX FELT 80x80x0.3mm, BLACK, (TSB#PM005432010) | 700-993856-000 | 1 |
| | REMOTE SENSOR INVISIBLE FELT | 1/SET | 700-SD1614-000 |
| | FELT B, 50x15x0.3mm HIMERON, w/SONY T-3500, 2-SIDED TAPE(T#9871858900) | 4/SET | 700-SDC019-001 |
| | SCREW ST3x10mm, PB BRASS BASED | 1/TUNING PCB BKT | 720-050300-100 |
| | SCREW 3x8mm, PM BRASS BASED | 4/TX | 721-010300-080 |
| | SCREW ST3x8mm BB T.T.S. (B TYPE), CBTS(P)-Z CHROMATE PLATING CBTB 3x8 MC) | 4/IC TO HEAT SINK | 722-080307-082 |
| | (F722-080308-182) SCREW 3x18mm BB T.T.S. (S TYPE) | 2/PCB BKT TO B. CAB. | 722-080308-180 |
| | SCREW 3x14mm PM TTS w/NICKEL-PLATED | 9/PCB BKT TO B CAB | 722-110300-142 |
| | | 1/BKT TO BTM | |
| | SCREW 3x20mm PM T.T.S. (STP 3x20 NI) | 4/MECHANICAL | 722-110300-200 |
| | *Cdf NUT M3x0.5 PITCH NI | 4/TX | 725-000030-500 |
| | SPONGE, SIZE:15mmx15mmx10mm | 700-0228A3-000 | 3 |
| | *Cdf 4" CABLE/PLASTIC TIE (SKB-1M/CV-100) | 727-000100-000 | 3 |
| | PVC TUBE AWG1 INNER DIA. 7.35mm DC-3, (DAE CHANG) (UL/CSA APP.) TRANSPARENT | UNIT*M* | 728-000073-000 |
| | *Cdf PVC HEAT SHRINKABLE TUBE DIA.3.5mm, (UNITUBE) (UL/CSA APP) | 728-015035-000 | 0.04 |
| | SENSOR SHIELDING PLATE, COPPER FOIL (SELF ADHESIVE) | 650-ST6140-000 | 1 |
| | PCB SHIELD FIBRE PAPER | 700-ST6122-000 | 1 |
| | DIFFUSING PAPER (PAPER D207) | 700-ST6139-000 | 1 |
| | SCREW ST2.6x10mm, PB BRASS BASED | 5/PCB F.PANEL | 720-050260-100 |
| | SCREW ST2x6mm, BB BRASS BASED | 1/LIGHT GUIDE TO F.PANEL | 720-110200-060 |
| | SCREW ST3x12mm, BB HEAD V5.9-6.3, BB BRASS BASED (P TYPE) | 2/F.PANEL BKT-F.PANEL | 720-110300-120 |
| | *Cdf FUSE HOLDER, HTF-015 | 550-790000-000 | 4 |
| DVD MECHANISM - STSD-010SMT | | | |
| 1 | DRIVE GEAR, MOLDED BLACK, CAV.2, POM M90 94HB | 509-CD3205-000 | 1 |
| 2 | LM BELT, MOLD BLK, DIA:28x1.85x1.85 LOY-BELT-CR MOTOR BELT (RUBBER) | 700-OCDD40-002 | 1 |
| 3 | PULLEY GEAR, MOLDED BLACK, CAV.4, POM M90 94HB | 509-CD3206-000 | 1 |
| 4 | CHUCK YOKE, MOLDED BLACK, CAV.2 (ABS) | 509-DVD302-000 | 1 |
| 5 | SLIDER, MOLDED BLACK, CAV.2 (ABS) | 509-CD3204-000 | 1 |
| 6 | CHASSIS, MOLDED BLACK, CAV.1 (HIPS) | 509-CD3202-000 | 1 |
| 7 | LEAF SWITCH LS-121-0A (LUP FUNG) | 022-001210-001 | 1 |
| 8 | TRAY, MOLDED BLACK, CAV.1 (ABS) | 509-CD3201-000 | 1 |
| 9 | (F700-0CDD18-000) MOTOR PULLEY, MOLDED BLACK, POM M90 94HB, CAV.6 (POM) | 509-0CDD18-000 | 1 |
| 10 | MOTOR-DC-006V-NORMAL 6V #RF-500TB-12560, (MABUCHI) 10gm (KSM-2101-ABM-AL) | 151-061256-000 | 1 |
| 11 | LOAD MOTOR PCB STS21AAST-01-09 | 033-STS21A-108 | 1 |
| 12 | SPRING PLATE, 0.2T S.S. | 650-CDD307-000 | 1 |
| 13 | CHUCK PLATE, DIA:19.9/DIA:3.5x0.8 ELECTROLYTIC ST. PLATE | 650-DVD303-000 | 1 |
| 14 | CD MECHANISM HOLDER, MOLDED NATURAL, CAV.2 (ABS) | 505-CD3203-000 | 1 |
| 15 | CHUCK PULLEY, MOLDED BLACK, CAV.2 (ABS) | 509-DVD301-000 | 1 |
| 16 | FFC CABLE HOLDER, MOLDED BLACK, CAV.4 (ABS) | 505-CD3210-000 | 1 |
| 17 | DVD-FLC-01-SAMG-N DVD MECHANISM FOR CD-R CMS-S21MG6 (SAMSUNG) | 163-000216-000 | 1 |

EXPLODED DRAWING PARTS LIST - CONTINUED

| Ref. No. | Description | Mfr's Part No. | Qty. |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------|
| 18 | DVD CUSHION, CR HARDNESS 50+2 DURO BLACK | 700-DVD304-000 | 4 |
| 19 | METAL BRACKET, 1.0 THK E.G.STEEL | 605-CD3211-000 | 1 |
| 20 | METAL BRACKET, 1.0 THK E.G.STEEL | 605-CD3211-000 | 1 |
| | SCREW ST2.6x10mm, BB BRASS BASED (P TYPE) | 720-110260-100 | 2 |
| | METAL WASHER DIA:2.8/DIA:9.5x0.5mm | 532-202809-550 | 1 |
| | PLANE WASHER DIA:2.8xDIA:7x0.5mm | 532-202807-050 | 2 |
| | METAL WASHER DIA:2.8/DIA:9.5x0.5mm | 4/DVD-CHASSIS 532-202809-550 | 4 |
| | PVC WASHER Ø10xØ6.05x0.1mm, K690-43 | 1/SET 532-510006-010 | 1 |
| | FOAM RUBBER, 6x5x4.5mm (HARDNESS 60 PAD CORD) | 700-0CDD48-001 | 1 |
| | SHIELD CORE (MABUCHI 53-192AB) | 700-0CDD50-000 | 1 |
| | HEATSINK SPACER, 50x6x2mm, | 1.4PCS/SET 700-D15669-000 | 1.4 |
| | INOAC RUBBER SPONGE C-4305 (BLK) w/TAPE | | |
| | SCREW ST2x5mm PB BRASS BASED (M2.3 HEAD) | 1/LEAF SW 720-050200-050 | 2 |
| | SCREW 2.6x5mm PM w/CHROMATE-PLATING | 1/SPRING PLATE 721-010260-052 | 2 |
| | SCREW 2.6x10mm BB T.T.S. (P TYPE) CHROMATE PLATING, (BTTB2.6x10MC) | 2/MOTOR-CHASSIS 722-080260-102 | 6 |
| | *CdF 4" CABLE/PLASTIC TIE (SKB-1M/CV-100) | 727-000100-000 | 1 |
| CENTER SPEAKER PORTION - SSQC3 | | | |
| 1 | SPEAKER CLOTH #FP-662-0WT (SILVER GREY) WIDTH:60"-62" | (230mmX160mm)X1PC/SET 662-0FP662-000 | 0.0252 |
| | | UNITY'D* | |
| 2 | SPEAKER CLOTH MESH, CAV.2 (HIPS) | 509-SQC303-000 | 1 |
| 3 | SPEAKER PANEL, MOLD CNS-0360 (HIPS), w/SPY | 500-SQC301-xxx | 1 |
| 4 | SPK00003#008OHM0050W w/BK DOME PAPER CAP #LF77SZ4307G55C8AS19PDB (GGECA) (L0234) | 131-308050-010 | 1 |
| 5 | HOLE COVER, MOLD CNS-0360 (HIPS) CAV:8 | 500-SSQ104-000 | 2 |
| 6 | SPEAKER CABINET, MOLD GREY(CNS-0360) (HIPS), w/ENGRAVING | 500-SQC102-000 | 1 |
| 7 | PUSH TERMINAL BOARD PT-213-03 BLACK, RED, MSP-105H-03 BLACK, RED *CdF SPK. BOX FELT 80x8x0.3mm, BLACK, (TSB#PM0005432010) | 2/SPK CAB 700-993856-000 | 2 |
| | SPEKAER GASKET, 1.5 THK FOAM RUBBER | 700-SQC204-000 | 1 |
| | SCREW ST3x20mm, PAB BRASS BASED | 4/CAB-SPK PANEL 720-010300-200 | 4 |
| | SCREW ST3x8mm, BB HEAD V5.9-6.3, BB BRASS BASED | 720-110300-080 | 2 |
| | 2/PUSH TERMINAL BOARD-SP CAB SCREW ST3x10mm BB HEAD V5.9-6.3 BRASS BASED | 4/SPK-SPK PANEL 720-110300-100 | 4 |
| SUB-WOOFER PORTION - SWT1A | | | |
| 1 | SUB WOOFER PANEL, MOLD CNS0360, (HIPS) w/PNT | 500-SWT106-xxx | 1 |
| 2 | LED PCB SWT1-01-06 | 033-00SWT1-600 | 1 |
| 3 | SUB-WOOFER TUBE, MOLD L.GREY (CNS-0360) (HIPS) CAV:4 | 509-SWT202-000 | 1 |
| 4 | SW BOX, 15mm PARTICAL BD, 220x380x285mm, SIL PVC MOKU ME-2907,w/SPY (30W) | 660-SWT107-xxx | 1 |
| 5 | SPEAKER POST ADAPTOR, MOLDED NATURAL, CAV.8 (ABS) | 503-650127-000 | 6 |
| 6 | RUBBER STAND, 22x8mm, BLACK, 7900, K-1S | 700-021000-000 | 4 |
| 7 | SPK006.5#004OHM0120W w/BK DOME PAPER CAP #SW165RZ5802G100F4AS36PFB (L0257) | 131-6540A0-010 | 1 |
| 8 | SPEAKER MESH, MOLDED BLACK, CAV.2 (HIPS) REV.1 | 509-299973-001 | 1 |
| 9 | SPEAKER CLOTH #FP-662-0WT (SILVER GREY), WIDTH:60"-62" FOR SUBWOOFER (320x320mm) | 662-0FP662-000 | 0.07 |
| | UNIT"YD" | | |

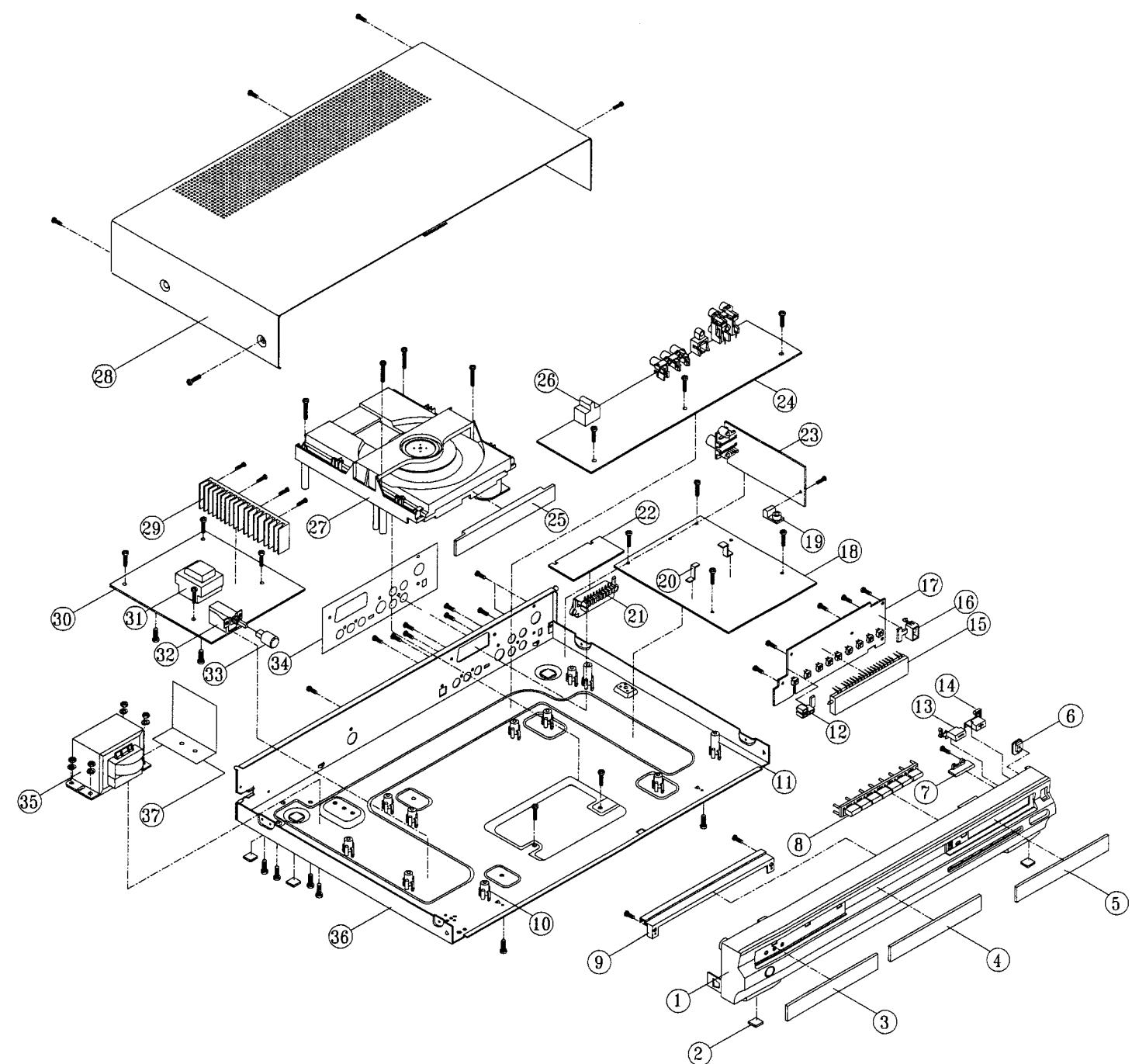
EXPLODED DRAWING PARTS LIST - CONTINUED

| Ref. No. | Description | Mfr's Part No. | Qty. |
|----------|-------------------------------------------------------------------------------------------------------|-----------------------------------------|------|
| 10 | AMP.BRACKET, MOLD L.GR(CNS-0360) (HIPS 94V0), CAV:1 (F550-823843-000) L BRACKET, MOLDED NATURAL (ABS) | 505-SWT104-000 | 1 |
| 11 | SUB-WOOFER AMPLIFIER PCB SWT1-01-05 (F550-266422-000) MOUNTING BRACKET, MOLDED NATURAL, CAV.8 (ABS) | 505-823843-000 | 2 |
| 12 | CONNECTION PCB SWT1-01-04 (F550-630123-000) PCB CONNECTION BRACKET, MOLDED BLACK, CAV.4 (ABS) | 033-00SWT1-600 | 1 |
| 13 | POWER TRANSFORMER (123-xxxxxx-xxx) | 123-xxxxxx-xxx | 1 |
| 14 | DISPLAY & KEY PCB SWT1-01-02 (F550-630123-000) | 033-00SWT1-600 | 1 |
| 15 | SHIELD CORE (MABUCHI 53-192AB) | 505-630123-000 | 4 |
| 16 | HEAT SINK, EXTRUDE ALUMINIUM | 613-SWT111-000 | 1 |
| 17 | BACK COVER PLATE, 1.2mm THK E.G. STEEL w/PNT, S:313x194.5mm | 650-SWT109-xxx | 1 |
| 18 | HEAT SINK COVER, MOLD L.GREY(CNS-0360) (HIPS) CAV:1 | 500-SWT108-000 | 1 |
| 19 | SHIELDING PCB SWT1-01-07 METAL WASHER 3.5x10x0.5mm | 033-00SWT1-100 | 1 |
| | FIBRE WASHER 3x8x1mm (NF77) | 4/SW BOX 532-203510-050 | 4 |
| | *CdF FIBRE WASHER Ø3.5x8x0.4mm (Dia:3x8x0.4mm) | 6/HEAT SINK 532-303008-100 | 6 |
| | SPRING WASHER 4mm BLACK | 2/AMP PCB 532-303508-040 | 2 |
| | SOUND TUBE GASKET, Dia:68x1.5mm EVA | 6/TF 532-404000-000 | 6 |
| | TUBE CUSHION, 5mm THK RUBBER FOAM, w/DOUBLE SIDE TAPE | 700-SWT213-000 | 1 |
| | SCREW ST2.6x8mm, PAB (M3 HEAD) (M3H), BRASS BASED | 1.5/SPEAKER 700-299633-000 | 1.5 |
| | SCREW ST2.6x6mm BB BRASS BASED | 12/PCB BKT 720-010260-080 | 12 |
| | SCREW ST3x8mm, BB HEAD V5.9-6.3, | 2/LED PCB 720-110260-060 | 2 |
| | BB BRASS BASED | 2/L BKT 720-110300-080 | 4 |
| | SCREW ST3x10mm BB HEAD V5.9-6.3 BRASS BASED | 2/MOUNTING BKT 720-110300-100 | 27 |
| | WOOD SCREW ST4x20mm PWA CHIT BOARD, W=9.5-10mm YELLOW ZINC | 8/AMP BKT-SUB WOOFER BOX 720-180400-202 | 8 |
| | WOOD SCREW ST3x12mm BA CHIT BOARD | 4/RUBBER STAND 720-190300-120 | 18 |
| | 4/SPK-SW BOX | 4/SPK POST ADAPTOR TO SW BOX | |
| | 4/SUB WOOFER TUBE TO SW BOX | | |
| | SCREW M3x8 PM BLACK ZINC | 4/HEAT SINK COVER 721-010300-081 | 4 |
| | SCREW 4x16mm, PM | 6/TRANSFORMER 721-010400-160 | 6 |
| | SCREW ST3x8mm BB T.T.S. (B TYPE), CBTS(P)-Z CHROME PLATING CBTB 3x8 MC | 6/HS-BACK PLATE 722-080307-082 | 6 |
| | SCREW ST3x16mm BB T.T.S. (B TYPE) CBTS(P)-Z | 4/POWER IC 722-080307-160 | 4 |
| | NUT M4 | 6/TF 725-000040-000 | 6 |
| | *CdF 4" CABLE/PLASTIC TIE (SKB-1M/CV-100) | 727-000100-000 | 4 |
| | *CdF PVC TUBE AWG3 INNER Dia:6.0mm, (DAE CHANG/TAE IK) (UL/CSA APP.) | UNIT*M* 728-000060-001 | 0.16 |
| | PVC TUBE AWG1 INNER Dia. 7.35mm DC-3, (DAE CHANG) (UL/CSA APP.) TRANSPARENT | UNIT*M* 728-000073-000 | 0.75 |
| | *CdF PVC HEAT SHRINKABLE TUBE Dia:3.5mm, (UNITUBE) (UL/CSA APP.) | UNIT*M* 728-015035-000 | 0.04 |

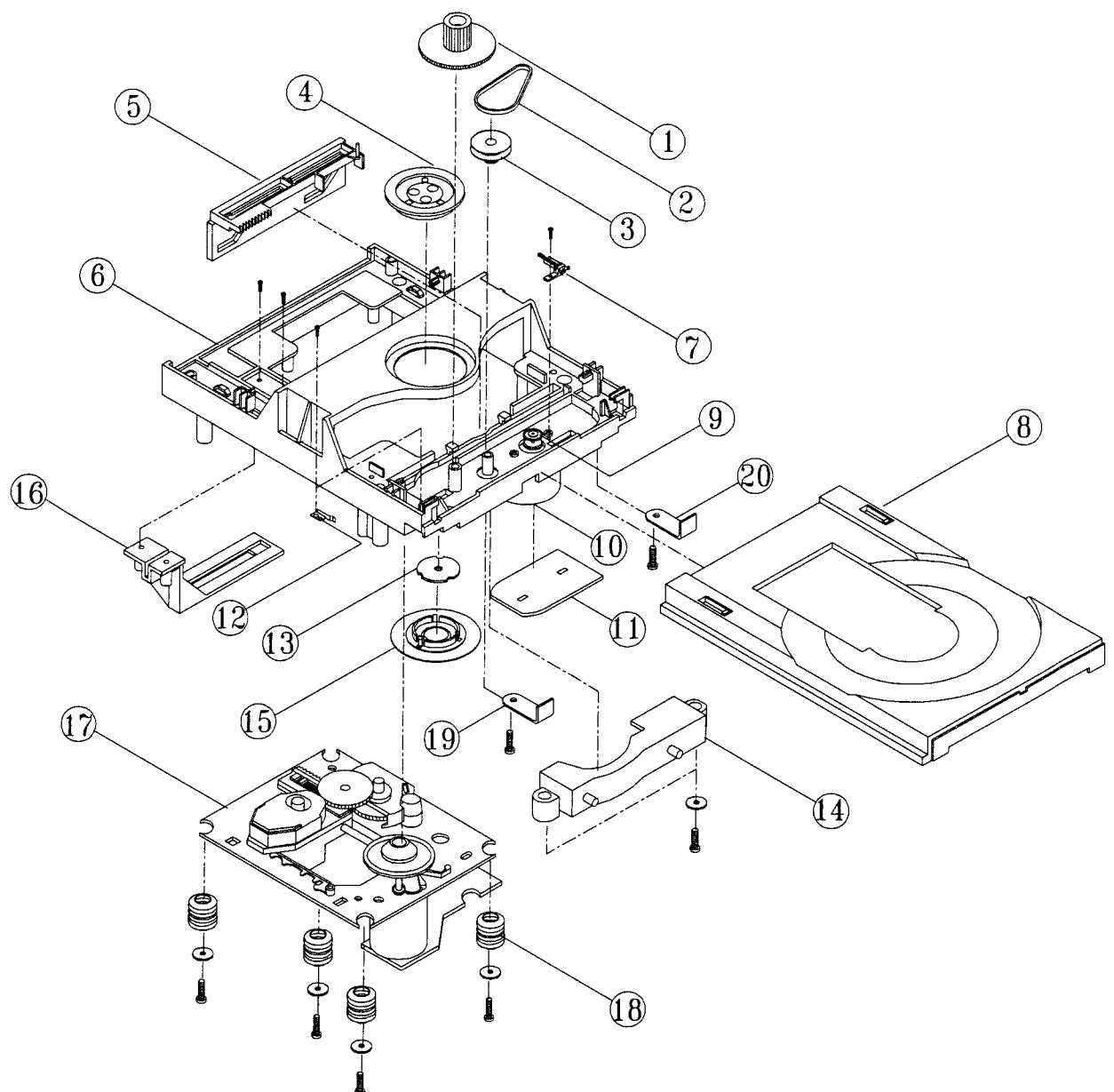
EXPLODED DRAWING PARTS LIST - CONTINUED

| Ref. No. | Description | Mfr's Part No. | Qty. | |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------|--------------------|
| | *CdF FUSE HOLDER, HTF-015 | 550-790000-000 | 8 | |
| 4-SPEAKER PORTION - SSQ3 | | | | |
| 1 | SPEAKER CLOTH #FP-662-0WT (SILVER GREY) (200mmX160mm)X4PCS/SET WIDTH:60"-62" UNIT"YD" | 662-0FP662-000 | 0.0875 | |
| 2 | SPEAKER CLOTH MESH, CAV.4 (HIPS) | 509-SSQ303-000 | 4 | |
| 3 | SPEAKER PANEL, MOLD CNS-0360 (HIPS), w/SPY | 500-SSQ301-xxx | 4 | |
| 4 | SPK00003"008OHM0050W w/BK DOME PAPER CAP #LF77SZ4307G55C8AS19PDB (GGEC)(L0234) | 131-308050-010 | 4 | |
| 5 | HOLE COVER, MOLD CNS-0360 (HIPS) CAV:8 | 500-SSQ104-000 | 4 | |
| 6 | SPEAKER CABINET, MOLD GREY(CNS-0360) (HIPS), w/ENGRAVING | 500-SSQ102-000 | 4 | |
| 7 | PUSH TERMINAL BOARD PT-213-03 BLACK, RED, MSP-105H-03 BLACK, RED FELT B, 50x15x0.3mm HIMERON w/SONY T-3500, 2-SIDED TAPE (T#9871858900) SCREW ST3x35mm, PAB (M3.5 HEAD) BRASS BASED SCREW ST3x8mm, BB HEAD V5.9-6.3, BB BRASS BASED SCREW ST3x10mm BB HEAD V5.9-6.3 BRASS BASED | 118-000213-000 4/SET 16/CAB-SPK PANEL 8/PUSH TER.BORD-SPK CAB 16/SPK-SPK PANEL | 700-SDC019-001 720-010300-350 720-110300-080 720-110300-100 | 4 16 8 16 |

EXPLODED DRAWING - MAIN UNIT

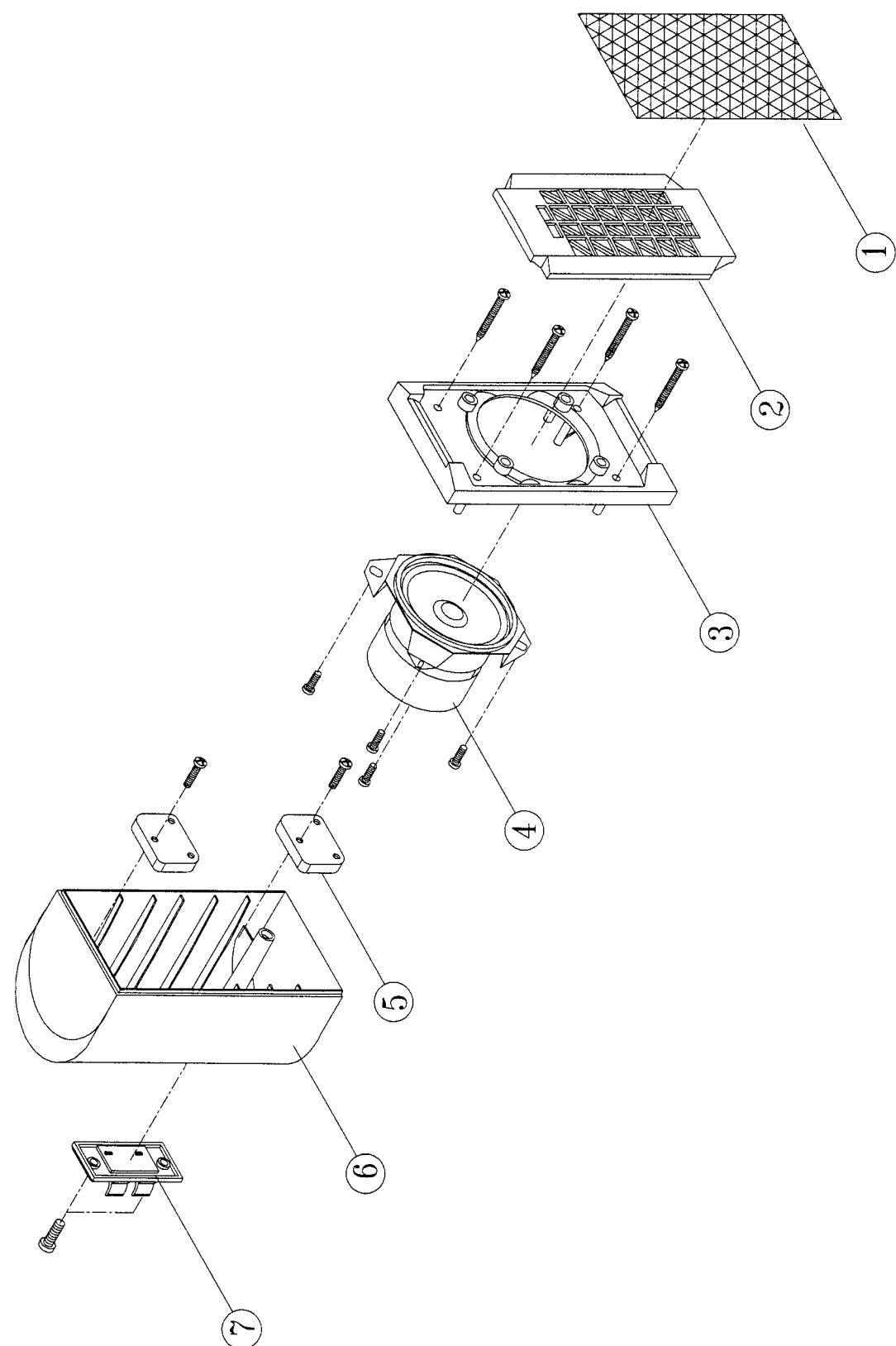


EXPLODED DRAWING - DVD MECHANISM



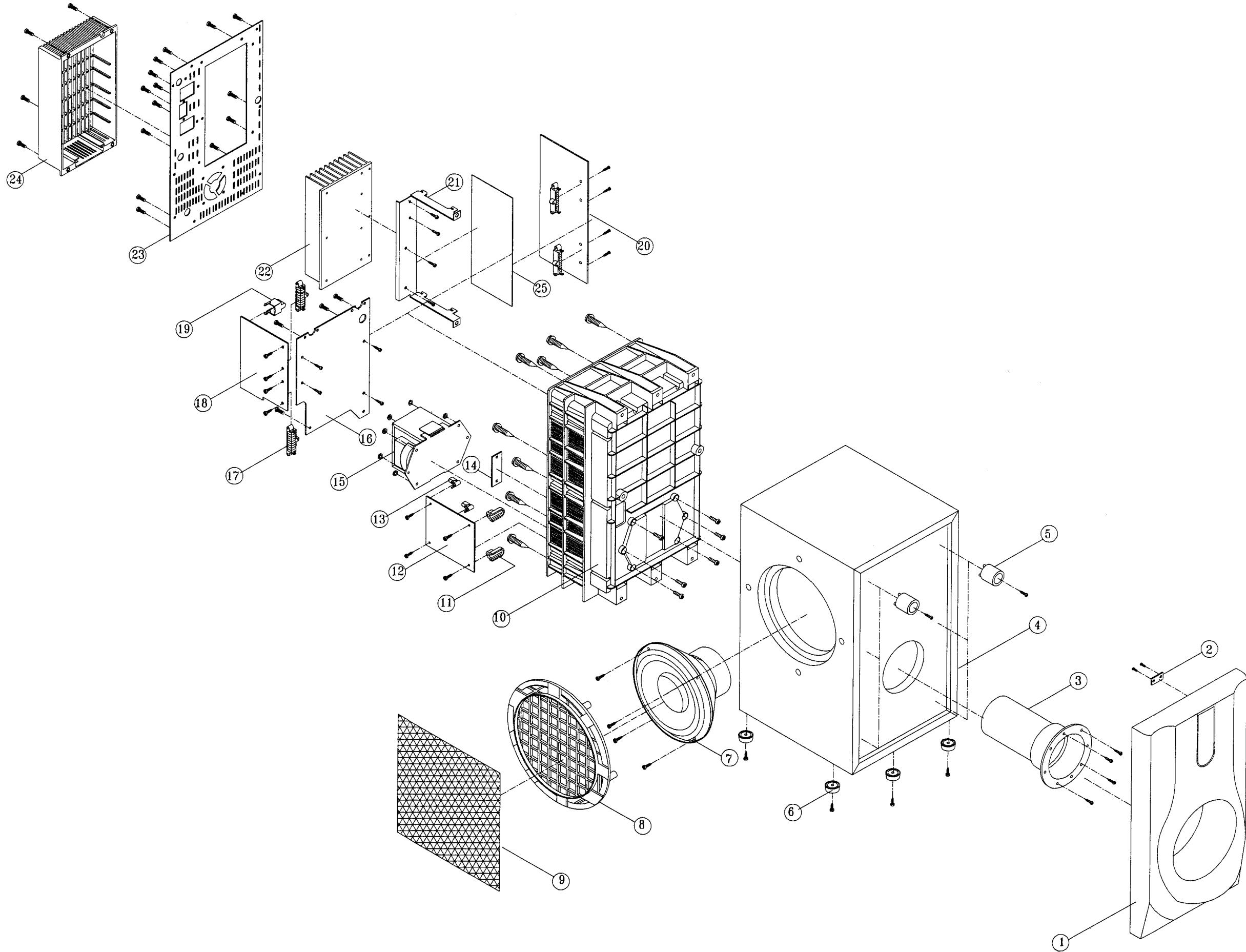
EXPLODED DRAWING - CENTER SPEAKER

(SSQC3)



EXPLODED DRAWING - SUB-WOOFER

(SWT1A)



EXPLODED DRAWING - 4-SPEAKER

(SSQ3)

